Urban Infrastructure Strategies for Managing Tourism-Led Growth in Ayodhya

Project Phase-II submitted to
Visvesvaraya National Institute of Technology, Nagpur
in partial fulfillment of the requirements for the award of the degree

Master of Technology
In
Urban Planning

by

Jyoti Rawat (MT23UPL012)

Under the guidance of
Dr. Pankaj Verma

Department of Architecture and Planning
Visvesvaraya National Institute of TechnologyNagpur 440 010 (India)

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Visvesvaraya National Institute of Technology, Nagpur

Declaration

I, **Jyoti Rawat,** hereby declare that this Project Phase-II titled "**Urban Infrastructure Strategies for Managing Tourism-Led Growth In Ayodhya**" is carried out by me in the Department of Architecture and Planning of Visvesvaraya National Institute of Technology, Nagpur. The work is original and has not been submitted earlier whole or in part for the award of any degree/diploma at this or any other Institution/University.

Jyoti Rawat

Date:

Certificate

This to certify that the Project Phase-II titled "**Urban Infrastructure Strategies for Managing Tourism-Led Growth In Ayodhya"** is submitted by **Jyoti Rawat** in partial fulfilment of the requirements for the award of the degree of **Master of Technology in Urban Planning**, VNIT, Nagpur. The work is comprehensive, complete and fit for final evaluation.

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Acknowledgment

Foremost, I would like to express my sincere gratitude to my project guide, **Dr. Pankaj Verma**, for his unwavering support, patience, motivation, and insightful guidance. His constant encouragement, constructive feedback, and generous cooperation have been invaluable throughout the course of this work and beyond.

I extend my heartfelt thanks to **Dr. Sameer Deshkar**, Head of the Department, Department of Architecture and Planning, and **Dr. Prem Lal Patel**, Director, Visvesvaraya National Institute of Technology, Nagpur, for providing the necessary infrastructure, resources, and a conducive environment for conducting the study during *Project Phase II*.

Special thanks to the **Uttar Pradesh Tourism Development Corporation**, **Ayodhya Development Authority (ADA)**, **Ayodhya Kotwali Office**, and **Municipal Corporations** for providing vital data that shaped this research.

I am deeply grateful to my parents for their continuous moral support and encouragement. I also wish to thank **PhD Scholar Tejendra Nagarbhoina** for his valuable inputs and guidance. A special mention goes to Karan, Shagun, Divyabharthi, Divya and all my colleagues, whose presence brought joy, balance, and motivation during challenging times.

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Abstract

Ayodhya, a prominent religious and cultural hub in Uttar Pradesh, India, is witnessing unprecedented tourism growth, particularly following the development of the Ram Janmabhoomi Temple. This surge has strained the city's urban infrastructure, leading to challenges such as congestion, inadequate amenities, and environmental degradation. This study, titled Urban Infrastructure Strategies for Managing Tourism-Led Growth in Ayodhya, aims to propose integrated urban infrastructure strategies to address these issues and promote sustainable tourism development.

The project focuses on assessing Ayodhya's existing tourism infrastructure, identifying demand-supply gaps, and developing strategies for crowd management, environmental protection, and heritage conservation. The study employs a mixed methodology, including literature reviews, primary surveys and secondary data analysis. Key findings highlight significant gaps in accommodation, transportation, waste management, and basic amenities, particularly during peak seasons, alongside overcrowding at major sites like Ram Janmabhoomi and Hanuman Garhi.

The study proposes phased strategies to address these challenges, including promoting homestays, implementing smart mobility solutions, enhancing waste segregation, and developing thematic tourism circuits (Religious, Cultural, and Hidden Heritage). These strategies aim to decentralize tourist pressure, improve visitor experiences, and ensure environmental sustainability. Recommendations include establishing a Tourism Monitoring Committee, enforcing green certifications, and creating a Thematic Trail Master Plan to integrate underutilized sites and promote local crafts. Despite limitations such as data availability and policy implementation challenges, the study underscores the need for a holistic, inclusive approach to transform Ayodhya into a resilient pilgrimage city, balancing economic growth, cultural preservation, and ecological sustainability.

Keywords: Tourism Infrastructure, Tourist Site Pressure, Urban Tourism Challenges, Tourism Demand-Supply Gap, Thematic Tourist Circuits, Crowd Management Strategies.

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Chapter -1
Introduction

1.1 Background

Tourism refers to the movement of people away from their usual place of residence for leisure, business, or other purposes, typically for a limited duration. It includes a diverse array of services such as transportation, accommodation, food, entertainment, and cultural activities, (Nations, 2010). As a global industry, tourism has grown into a major economic, social, and cultural force.

The roots of modern tourism can be traced back to the 18th and 19th centuries during the Industrial Revolution, when improved transportation and increased leisure time enabled more people to travel. Early travel companies, such as Thomas Cook, played a significant role in making organized travel accessible to the broader public (Nations, 2010).

Today, tourism is a key contributor to economic development, generating employment, supporting infrastructure investment, and facilitating international trade. It also fosters cross-cultural understanding and global cooperation. For many developing nations, tourism is a vital sector that contributes significantly to GDP and foreign exchange earnings. However, issues such as environmental degradation and over-tourism have highlighted the need for sustainable tourism practices that balance economic growth with cultural and ecological preservation (Organization, 2011).

Global Tourism Scenario

In 2024, international tourist arrivals reached approximately 1.4 billion (*UN Tourism, World Tourism Barometer*). The tourism industry made a significant contribution to the world economy, with its total input to global GDP estimated at nearly $10 trillion in 2023 (*World Travel & Tourism Council - WTTC*). In terms of employment, tourism directly and indirectly generated 348 million jobs worldwide in 2024 (*UN Tourism, Global Tourism Statistics*). International tourism receipts, reflecting visitor spending, amounted to $1.63 trillion in 2023 (*World Tourism Barometer*). Furthermore, domestic tourist

spending rose by more than 18% in 2023, reaching nearly $5 trillion, demonstrating a strong rebound in local travel (*WTTC*).

Indian Tourism Scenario

India recorded approximately 1.73 billion domestic tourist visits in 2024 (*India's Travel Sector Rebounds with Strong Domestic Tourism*). The Indian travel and tourism sector contributed more than INR 19.13 trillion (around $230 billion) to the nation's GDP in 2023 (*World Travel & Tourism Council - WTTC*). That same year, the sector supported nearly 43 million jobs (*WTTC*). Domestic visitor spending reached around INR 14.64 trillion in 2023 (*WTTC*), reflecting a strong domestic market. Additionally, Uttar Pradesh led the country in domestic tourism by attracting 317 million visitors in 2024 (*News Article: India's Travel Sector Rebounds with Strong Domestic Tourism*).

1.2 Types and Forms of Tourism

Tourism is categorized in multiple ways based on the movement of tourists, the purpose of their visit, and the form or nature of travel. These classifications help understand tourism dynamics and plan appropriate infrastructure and policy.

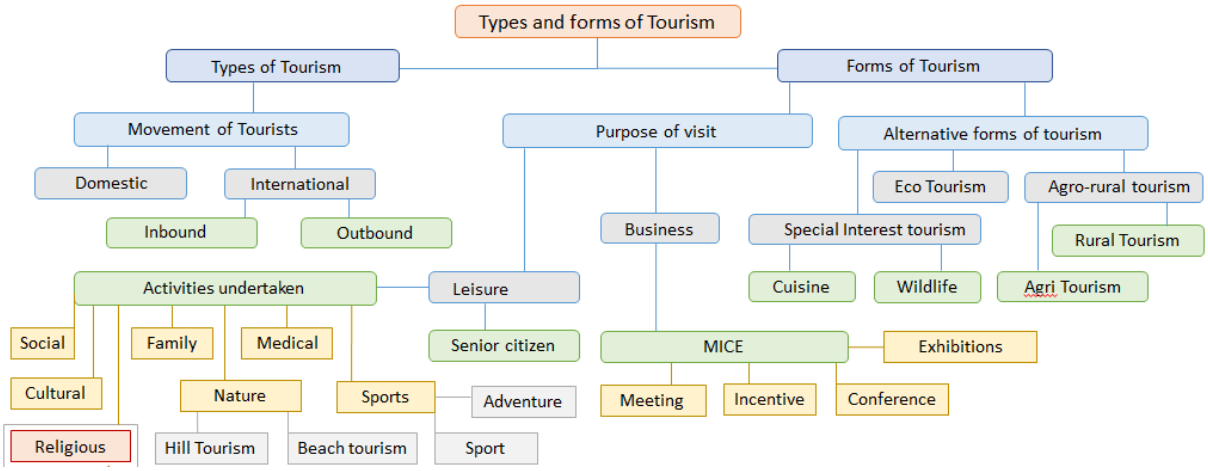


Figure 1. Structure of Diff. Types and forms of Tourism

1. Types of Tourism Based on Movement of Tourists:

a. **Domestic Tourism**: Travel within the same country. For instance, an Indian traveling from Maharashtra to Varanasi for pilgrimage.
b. **International Tourism**:
    - **Inbound Tourism**: Tourists traveling *into* a country. Example: A foreign traveler visiting the Taj Mahal.
    - **Outbound Tourism**: Citizens of a country traveling *outside* their nation. Example: Indians going to Dubai or Paris for vacation.

2. Based on Activities Undertaken:

These reflect tourists' motivations:

a. **Religious Tourism**: Visiting religious places like temples, mosques, churches, etc. (e.g., Varanasi, Amritsar, Ajmer).
b. **Cultural Tourism**: Engaging with heritage, music, art, or festivals.
c. **Medical Tourism**: Seeking health or medical treatment in other regions.
d. **Social & Family Tourism**: Visiting friends or family, or traveling for social functions like weddings.
e. **Nature & Adventure Tourism**: Involving activities like trekking, hiking, wildlife exploration, and sightseeing.
f. **Sports Tourism**: Either participating in or watching sports events.
g. **Leisure Tourism**: Relaxation-focused travel, including **senior citizen tourism**, beach holidays, or spa retreats.

3. Purpose-Based Tourism:

a. **Business Tourism**: Includes corporate travel.
b. **MICE Tourism**: Refers to Meetings, Incentives, Conferences, and Exhibitions—a key sub-category under business tourism which brings professionals together for structured events.

4. Forms of Tourism (Alternative Tourism):

These are niche, sustainable, or community-driven travel forms:

a. **Eco-Tourism**: Environmentally responsible travel to natural areas, often involving conservation efforts.
b. **Agro-Rural Tourism**: Tourists experience farming, rural life, and local culture.
c. **Special Interest Tourism**:
    - **Cuisine Tourism**: Food and culinary experiences.
    - **Wildlife Tourism**: Visiting national parks, tiger reserves, etc.
    - **Rural and Agri Tourism**: Exploring traditional village life and agriculture.

Importance of Religious Tourism

Religious tourism holds a dominant position in India's domestic travel landscape. According to statistics, over 60% of domestic tourists travel for religious or spiritual purposes**,** while other motivations like leisure, medical, or business account for under 40%**.**(*Source: Ministry of Tourism data and schemes such as PRASHAD and Swadesh Darshan*)

Why It Matters:

India is home to multiple major religions, sacred sites, and festivals that attract millions each year—making religious tourism a unifying force across regions and cultures.

Cultural, Economic, and Growth Significance of Religious Tourism

The three core areas where religious tourism has major impact:

1. **Cultural Significance**:
    - It preserves ancient heritage**,** fosters spiritual growth, and builds unity by bringing diverse communities together. (Subhasis Rakshit, 2024)
    - Religious sites and festivals play a central role in shaping India's identity.
2. **Economic Impact**:
    - Religious tourism generated approximately ₹1.34 lakh crore in 2022.
    - It supports over 100 million jobs, directly and indirectly. (Chaturvedi, 2025)
    - It also drives local business growth and promotes infrastructure development through initiatives such as PRASHAD and Swadesh Darshan**.** (Dekho Apna Desh: Rediscovering India's Spiritual Heritage Through Swadesh Darshan, 2024)
3. **Growth Drivers**:
    - Growth is supported by improved connectivity, digital platforms, and focused government initiatives. (Gupta, 2024)
    - These factors have made religious destinations more accessible and attractive to a broader range of visitors.

In conclusion, religious tourism is both a cultural pillar and a major economic asset for India, with immense potential for further growth and development in the coming years.

1.3 Major Spiritual Cities of India and Their Impact

India's major spiritual destinations, which play a crucial role in shaping the cultural and economic landscape of the country. These faith-based destinations—such as **Ayodhya, Varanasi, Tirupati, Amritsar, Haridwar, Bodh Gaya**, and others—serve as dynamic urban growth drivers. They catalyze infrastructure development, generate employment,

diversify local economies, and promote cultural unity. (Ayodhya A Rising Global Spiritual Capital, 2024)

These cities are not just pilgrimage centers but also economic hubs with massive annual footfall, often surpassing some of the world's top tourist destinations.

Figure 2 Spiritual Cities of India

Visitor Statistics at Key Religious Sites

In recent years, tourists—especially domestic travelers—have shown growing interest in spiritual and cultural destinations. The motivations for travel are no longer limited to leisure or entertainment; many people now seek purpose-driven travel experiences rooted in spirituality, heritage, and inner well-being**.** As a result, religious destinations are experiencing record-breaking footfall, transforming into economic and infrastructural growth zones.

These destinations reflect the highest levels of footfall in Indian religious tourism, underlining their cultural, spiritual, and economic importance.

Table 1. Most Visited Religious Destinations in India

Site/Event	Annual Visitors (approx.)
Ayodhya (2024)	160 million
Varanasi (2023)	122 million
Tirupati	20–30 million
Golden Temple	35–36 million

Their popularity also makes them key centers for studying the impact of tourism on infrastructure, economy, and society (dhawan, 2025)

1.4 Comparative analysis

Table 2. Comparative analysis of Varanasi, Ayodhya and Tirupati

Parameter	Varanasi	Ayodhya	Tirupati	Most effected
Known For	Oldest living city, spiritual capital of India.	Sacred birthplace of Lord Ram; national focus post Ram Mandir.	Tirumala Temple; religious and economic pillar of Andhra Pradesh.	All three (equal religious value)
Tourist Footfall	~8 crore in 2023, steady rise after Kashi Corridor.	Jumped from 34 lakh (2019) to 16.4 crore (2024).	~3 crore per year, consistently high footfall.	**Ayodhya** *(due to highest recent surge)*
Economic Impact	- Tourism revenue rose from ₹200 cr to ₹350 cr (2023); - 30% rise in local business. - Employment increased by 20%.	- Expected ₹5,000 cr revenue by 2025; - ₹1 lakh crore temple economy projected. *(NITI Aayog 2024)* - New Job opportunities	~₹3.48 lakh crore GDP contribution (2023); - 25% increase in tax revenue. - Economic leakage remains around 30%.	**Tirupati & Ayodhya** *(Tirupati—GDP impact; Ayodhya—growth rate)*
Physical Impact	- Urban area doubled from 929.27 km² in 1991 to 1,640.22 km² by 2021. congestion increased; 2,000+ stalls added during festivals.	- Urban area expanded with a ₹85,000 crore investment for 300,000 daily visitors. - Projected resident-to-tourist ratio is 1:10. - New airport and railway station upgrades	- Urban area expanded by 10% in 2023. - Tourist-related traffic increased by 25%, leading to congestion. Temporary structures during Brahmotsavam cause periodic congestion.	Varanasi shows the most substantial area expansion historically. **Ayodhya** *(due to rapid city transformation)*
Infrastructural Impact	- ₹45,000+ cr invested in roads, corridors, terminals; Smart City works ongoing. - New cable car project planned to alleviate traffic congestion.	₹85,000 cr invested in Airport, highways, Ram Path, logistics, PRASHAD scheme. *(MoUD)*, city-wide redesigns under Ayodhya Vision 2047. Smart city + riverfront + hospitality boom.	- Modernization of railway, - multimodal hubs in progress. - Smart City initiatives approved for infrastructure upgrades.	Ayodhya shows the most ambitious investment plans aimed at transforming its status as a major pilgrimage hub.
Social Disruption	Increased cultural activity but risk of displacement, - 30% rise in hospital strain.	Boosted cultural pride, but increased petty crime, civic strain, Sharp - rise in local cost of living, rental rates doubled, cultural gentrification, resource stress (NCRPB, 2024).	- Stable; community adapted to tourist flow over decades. - Enhanced social engagement, but 18% rise in rent; pressure on healthcare during events.	**Ayodhya**, due to fast-tracked development disrupting traditional community rhythms and affordability.
Environmental Impact	- Air quality is among the worst (PM2.5 at 125+); - 1,200 tons/day of waste; - water pollution worsened due to tourism activities.	- Pollution, river contamination rising; - fragile balance with ecology, unsustainable tourism zones (MoEFCC Ayodhya Report 2024). - Resource depletion concerns due to rising water demand from tourism growth.	- Air quality affected by vehicular emissions (PM2.5 levels at 38 µg/m³); - solid waste issues due to surging pilgrims; managing tourism sustainably remains a challenge.	Varanasi faces the most severe pollution issues historically while Ayodhya's rapid growth raises new concerns about resource management and pollution control.

- **Ayodhya** is the **most affected in terms of speed of change** — tourism footfall, land use transformation, and infrastructure overdrive have created **intense short-term impact**.
- **Varanasi** shows deep-rooted environmental and social impact, particularly due to **high pollution levels** and **displacement from redevelopment projects**.
- **Tirupati**, while dealing with consistently high tourism, has **more mature systems**, making it **least negatively affected** overall.

Each city's experience underlines the need for **balanced religious tourism development**

1.5 Need of the Study

Ayodhya has rapidly emerged as one of **India's fastest-growing religious tourism hubs**, with footfall soaring from **34 lakh in 2019 to 16.4 crore in 2024** following the Ram Mandir inauguration (dhawan, 2025)

This unprecedented growth has led to overcrowding, urban sprawl, land-use shifts, and socio-economic stress. Despite ₹85,000+ crore in investment, the city still lacks an integrated urban planning framework essential for long-term sustainability *(Source: Comparative Analysis – Ayodhya Case)*.

Unlike Tirupati (mature systems) or Varanasi (complex legacy issues), Ayodhya stands at a critical early stage—making it the ideal time for proactive tourism planning *(Source: Visual Impact Analysis)*.

Without intervention, unplanned tourism may erode cultural authenticity, increase pollution, and damage liveability. Hence, **Ayodhya urgently needs an integrated tourism development model** to ensure:

a. Balanced urban growth
b. Enhanced visitor experience
c. Heritage protection
d. Long-term sustainability

This study is therefore vital to guide Ayodhya's transformation through sustainable mobility, upgraded amenities, environmental management, and inclusive community strategies.

1.6 Aim

The study aims to propose integrated urban infrastructure strategies for Ayodhya by analyzing tourism dynamics, assessing associated impacts and gaps, and promoting long-term sustainability

1.7 Objectives

1. To understand the study area profile and analyse tourist statistics
2. To identify key parameters and methods for evaluating Ayodhya's tourism infrastructure.
3. To evaluate the existing tourism infrastructure and prevailing tourism conditions in Ayodhya.
4. To assess demand–supply gaps and key challenges in Ayodhya's tourism infrastructure.
5. To propose integrated strategies and Recommendation for sustainable tourism development

1.8 Scope

1. Tourism Infrastructure Assessment – Evaluate existing infrastructure, identify gaps, and assess urban services.
2. Demand & Supply Gaps of Infrastructure – Analyze tourism's impact on urban growth, Aminities, and services.
3. Sustainable Development Strategies – Propose solutions for Crowd management, eco-tourism, and smart infrastructure.
4. Policy Recommendations – Develop guidelines for stakeholders, governance, and phase wise recommendation for Ayodhya Development

1.9 Limitations

1. Data Availability: The research relies on existing data, surveys, and stakeholder input, which may have limitations
2. Tourism Infrastructure: focus only in physical infrastructure like Accessibility(transportation), Accommodation and Tourism Facility
3. Study area covers 79.8 sq.km having 25 wards only
4. Policy Implementation Challenges: While recommendations are provided, their execution depends on government policies, funding, and stakeholder cooperation.

1.10 Methodology

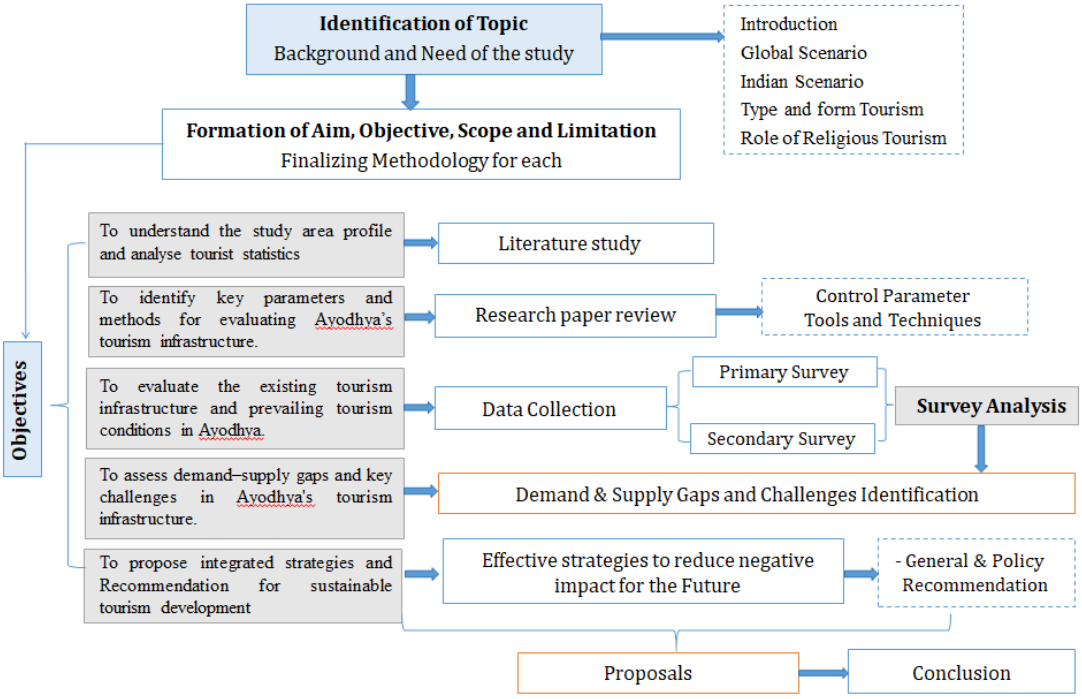

Identification of Topic
Background and Need of the study
Introduction
Global Scenario
Indian Scenario
Type and form Tourism
Role of Religious Tourism
Formation of Aim, Objective, Scope and Limitation
Finalizing Methodology for each
Objectives
To understand the study area profile and analyse tourist statistics
Literature study
To identify key parameters and methods for evaluating Ayodhya's tourism infrastructure.
Research paper review
Control Parameter
Tools and Techniques
To evaluate the existing tourism infrastructure and prevailing tourism conditions in Ayodhya.
Data Collection
Primary Survey
Secondary Survey
Survey Analysis
To assess demand–supply gaps and key challenges in Ayodhya's tourism infrastructure.
Demand & Supply Gaps and Challenges Identification
To propose integrated strategies and Recommendation for sustainable tourism development
Effective strategies to reduce negative impact for the Future
- General & Policy Recommendation
Proposals
Conclusion

Figure 3. Methodology For Framework of work

Chapter -2
Study Area Profile

Ayodhya, a city steeped in ancient history and spiritual significance, is located on the banks of the sacred Sarayu River in the northern Indian state of Uttar Pradesh. It is one of the seven most important pilgrimage sites (Sapta Puri) in Hinduism and holds a cherished place in Indian mythology and tradition. (Sapta puri, 2023)

Figure 4. Ayodhya City geometric Location

Ayodhya, recognized as the birthplace of Lord Ram, holds a prominent position as one of India's most revered spiritual destinations. The inauguration of the Shree Ram Janmabhoomi Temple marks a new chapter in the city's rich heritage, further enhancing its global stature. With its profound religious importance, historic sites, and vibrant cultural fabric, Ayodhya offers visitors a unique opportunity to experience tradition, devotion, and history in one setting. As the city embraces a new era, it continues to honour its timeless legacy, welcoming millions of pilgrims and travellers each year.

Beyond its religious significance, Ayodhya captivates visitors with its architectural marvels, age-old rituals, and festivals that celebrate its mythological roots. As modern infrastructure develops alongside ancient temples and ghats, the city stands as a living testament to India's enduring spiritual ethos.

Lord Ram Birthplace : Ayodhya is revered as the birthplace of Lord Rama, a revered deity in Hinduism, making it a significant pilgrimage site

Ram Janmabhoomi Temple: The Ram Janmabhoomi Temple, a sacred site, which has been a point of cultural and historical significance.

Spiritual and Cultural Significance: a rich cultural heritage, with numerous ancient temples, ghats, and monuments

Table 3. Ayodhya city area profile

Parameter	Details
Coordinates	26.80° N, 82.20° E
District	Ayodhya District (formerly Faizabad District)
Elevation	Approximately 93 meters (305 feet) above sea level
Climate Type	Humid Subtropical

2.1 Regional Connectivity

Ayodhya is increasingly becoming well-connected with major cities and regions across India, thanks to significant developments in its transport infrastructure. This enhanced regional connectivity is pivotal in supporting the growing influx of pilgrims, tourists, and investors, especially following the inauguration of the Shree Ram Janmabhoomi Temple.

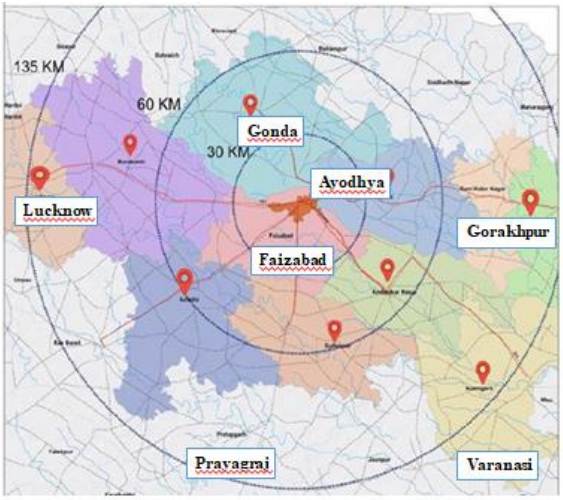


Figure 5. Regional Connectivity of Ayodhya to other major cities

2.1.1 Roadway

Ayodhya is well-connected by a network of national highways and expressways:

a. **National Highways**: NH-27, NH-330, and NH-233 provide smooth access to cities like Lucknow, Gorakhpur, Varanasi, and Prayagraj. (TripCosmos.co, 2025)

Table 4. Reginal connectivity of Ayodhya city to major cities

City	Distance	Time	Route
Lucknow	135 km	3.5 hrs.	NH-27, NH-330
Varanasi	200 km	5 hrs.	NH-19---NH-330A
Prayagraj	170 km	4 hrs.	NH-330
Gorakhpur	165 km	4 hrs.	NH-28---NH-233
Delhi	650 km	10-12 hrs.	NH-19---LKO---AY
Patna	230 km	6 hrs.	NH-922, via Saryu Bridge

b. **Purvanchal Expressway**: This major expressway links Lucknow to Ghazipur, enhancing connectivity to Ayodhya and facilitating faster travel. (mishra, 2025)

c. **Ayodhya Ring Road**: A 68-km four-lane ring road is under development to alleviate city traffic and improve access to NH-27, NH-330, and NH-330A. (lokmarg, 2024)

d. **UPSRTC Bus Services**: The Uttar Pradesh State Road Transport Corporation operates regular bus services connecting Ayodhya to major cities like Lucknow, Varanasi, Gorakhpur, and Delhi. (Dangrocha, 2024)(YatraDham)

2.1.2 Railway

Ayodhya is served by two primary railway stations:

- **Ayodhya Junction (AY)** and **Ayodhya Cantt (AYC)**: These stations offer direct train services to major cities including Delhi, Mumbai, Kolkata, Lucknow, Varanasi, and Patna. (Swiggy Diaries)
- **Notable Trains**: Trains like the Mumbai LTT–Ayodhya Cantt SF Express (22103) cover a distance of 1,599 km, connecting Mumbai to Ayodhya. (RailYatri,2024)

2.1.3 Airport

The inauguration of the Maharishi Valmiki International Airport has significantly boosted Ayodhya's air connectivity:

a. **Direct Flights**: Airlines such as IndiGo, Air India Express, and Akasa Air operate direct flights between Ayodhya and cities like Delhi, Mumbai, Bengaluru, and Hyderabad. (makemytrip)
b. **Flight Duration**: A direct flight from Delhi to Ayodhya takes approximately 1 hour and 20 minutes, covering a distance of about 531 km. (myflighttrip)

2.2 Urban sprawl Growth of Ayodhya

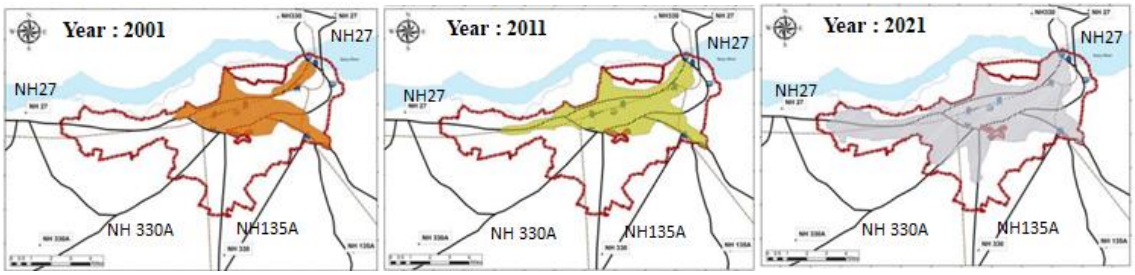


Figure 6. Urban sprawl of Ayodhya in year 2001, 2011 and 2021

Year 2001- It appears concentrated around the central and eastern parts within the administrative boundary, with some development extending north towards the river and along NH27.

- **Growth Direction**: Limited expansion, primarily within existing municipal boundaries.
- **Key Factors**: The absence of an updated master plan post-1983 led to minimal structured development.

Year 2011- particularly towards the west and further along NH27. The growth seems to have filled in some of the less developed areas within the 2001 urban core and expanded outwards.

- **Growth Direction**: Emerging expansion along major corridors connecting Ayodhya to neighboring cities like Lucknow and Varanasi.
- **Key Factors**: The city's spiritual prominence began attracting more pilgrims, prompting initial infrastructural improvements and modest urban growth.

Year 2021- the urban area now covering a much larger portion of the administrative boundary. The sprawl has continued to expand in multiple directions, appearing to encompass most of the central and western parts shown within the boundary.

- **Growth Direction**: Significant expansion, especially towards the south and east, incorporating areas from Basti and Gonda districts.
- **Key Factors**: The inauguration of the Shree Ram Janmabhoomi Temple and the introduction of the Ayodhya Master Plan 2031 catalyzed rapid urban development, including the integration of 343 additional villages into the municipal limits.

Directional Trends in Urban Growth

- **Southward and Eastward Expansion**: Inclusion of villages from Basti and Gonda districts, aligning with the city's strategic development plans.
- **Corridor Development**: Growth along key routes like Ayodhya-Lucknow and Ayodhya-Varanasi, enhancing connectivity and economic opportunities.

2.3 Urban Development and Demographic of Ayodhya City

2.3.1 Decadal Area Growth of Ayodhya

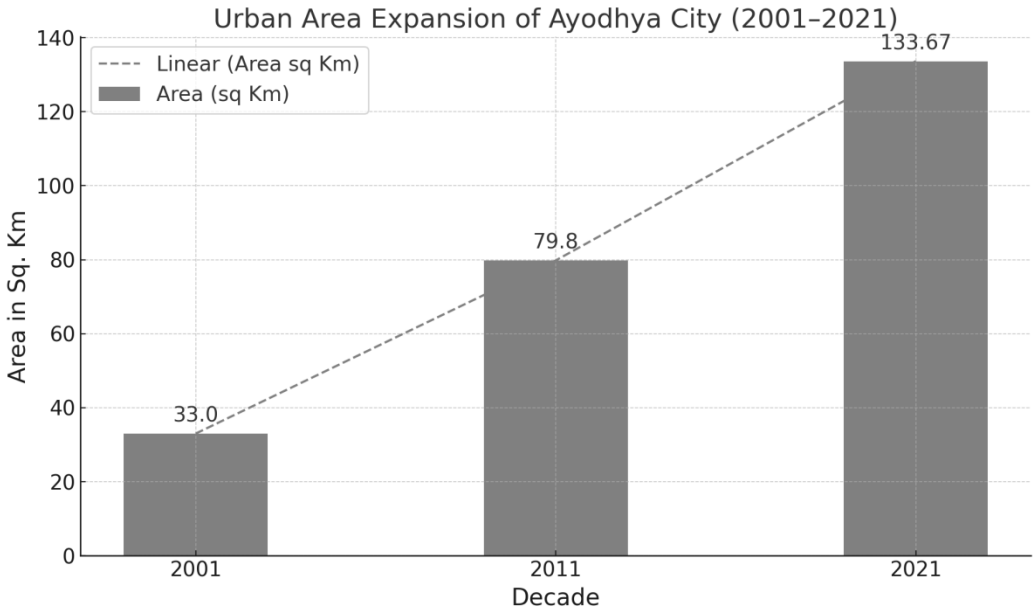


Figure 7. Urban area expansion of Ayodhya city (2001-2021)

Ayodhya has witnessed substantial spatial growth over the past two decades. In 2001, the city covered an area of 33 sq. km, which expanded to 79.8 sq. km by 2011—marking a 141% growth. The growth continued into the next decade, reaching 133.67 sq. km by 2021**,** reflecting a 67.5% increase in spatial extent. This trend indicates a clear linear pattern of urban expansion**,** mainly driven by increased in-migration, religious tourism, and the necessity for enhanced infrastructure. Due to this rapid growth, the Ayodhya Master Plan considered 133.67 sq. km as the planning area for future development (Source: Urban Area Expansion Chart, 2021).

2.3.2 Population Statistics of Ayodhya

Population growth in Ayodhya has shown a steady upward trajectory over the decades. From a population of 83,177 in 1961, the number rose to 248,706 by 2011**,** showing a consistent increase with noticeable surges post-1981. The linear and exponential growth patterns suggest influences from urbanization, religious infrastructure development, and migration associated with the increasing prominence of Ayodhya as a spiritual center (Source: Population Statistics Chart, Census 1961–2011).

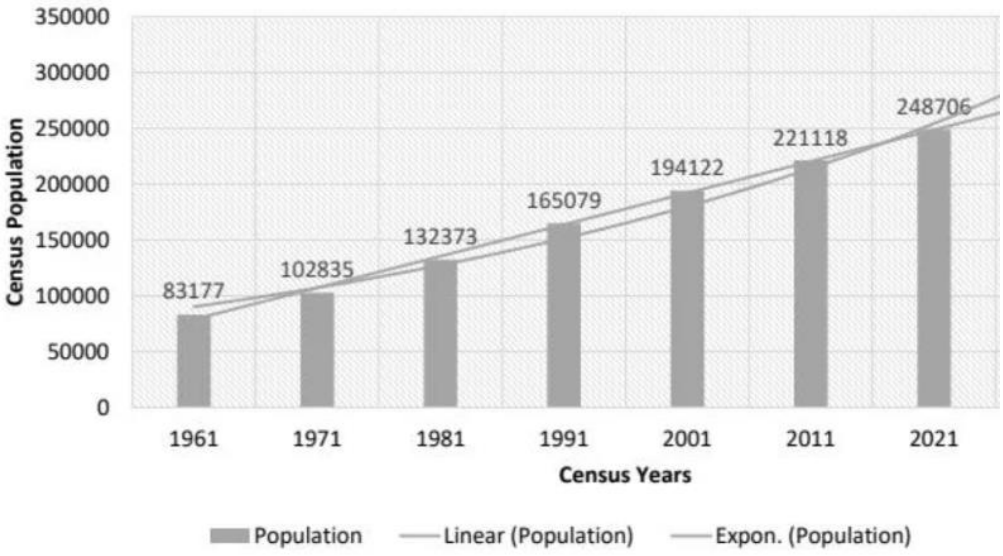


Figure 8. Population growth of Ayodhya city (1961-2021)

2.3.3 Demographic and Economic Overview

Table 5. Demographic profile of Ayodhya city

Parameter	Details
Area	79.8 sq. km
Number of Wards	25
Population (ADA Urban Area)	2,21,118 (Based on DCHB)
Sex Ratio	763 females per 1000 males
Population Density	1056 persons/sq. km
Economic Activity	Predominantly Primary and Tertiary sectors
Number of Households	10,026 households (Census 2011)
Average Household Size	5.5 persons (Census 2011)

This data suggests Ayodhya has a relatively high population density and a gender ratio that points to social disparities. Economic activity is centered on pilgrimage tourism and local services, underlining the importance of Ayodhya's religious and cultural economy (Source: Census 2011 and DCHB).

2.3.4 Built vs. Open Area Map

This map distinguishes between constructed and open spaces in Ayodhya. It reveals significant urban clustering around the city center, with open lands gradually reducing due to urban encroachment. Such visualizations are critical for planning sustainable green spaces and managing density (Source: Built vs. Open Area Map).

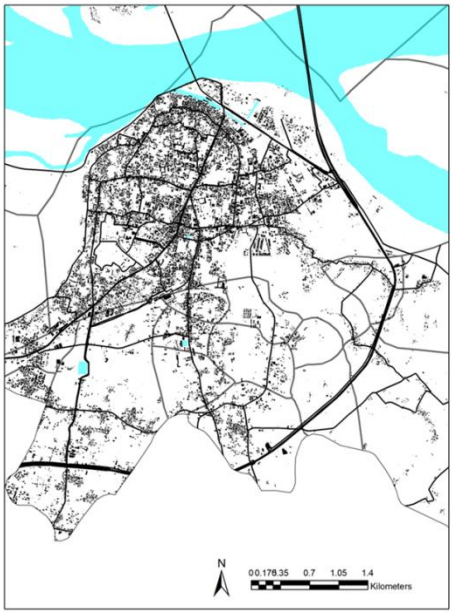
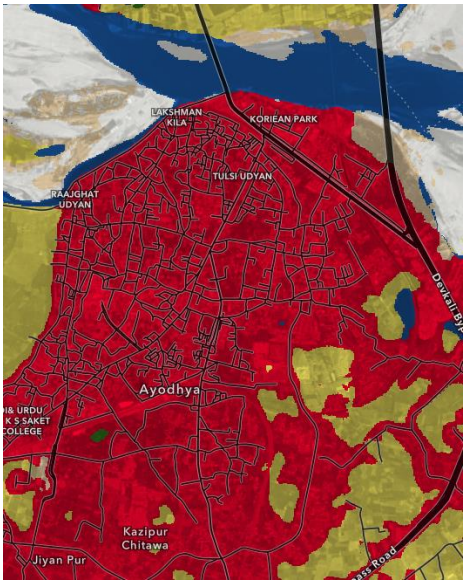


Figure 9. Built vs. Open area of Ayodhya

2.3.4 Land Use and Land Cover Map



The land use classification shows that a majority of Ayodhya's land is currently under built-up (urban) use, marked predominantly in red. It identifies sacred zones like the Ram Janmabhoomi Complex**,** transportation routes, and green zones (parks, agricultural fields) which are under pressure due to expanding development (Source: Land Use Land Cover Map, 2021). (Land Cover exploree)

Figure 10. Land Use and Land Cover Map of Ayodhya

Ayodhya’s transformation into a rapidly urbanizing spiritual metropolis. The combination of decadal spatial expansion, steady population growth, and strategic infrastructure planning calls for sustainable urban governance that honors the city's cultural legacy while preparing for its modern future.

2.4 Tourism Dynamics in Ayodhya

2.4.1 Total Tourist Arrival in Ayodhya (2017–2024)

The tourist arrival data for Ayodhya from 2017 to 2024 reveals a dramatic growth trajectory, particularly in recent years. The annual footfall increased as follows:

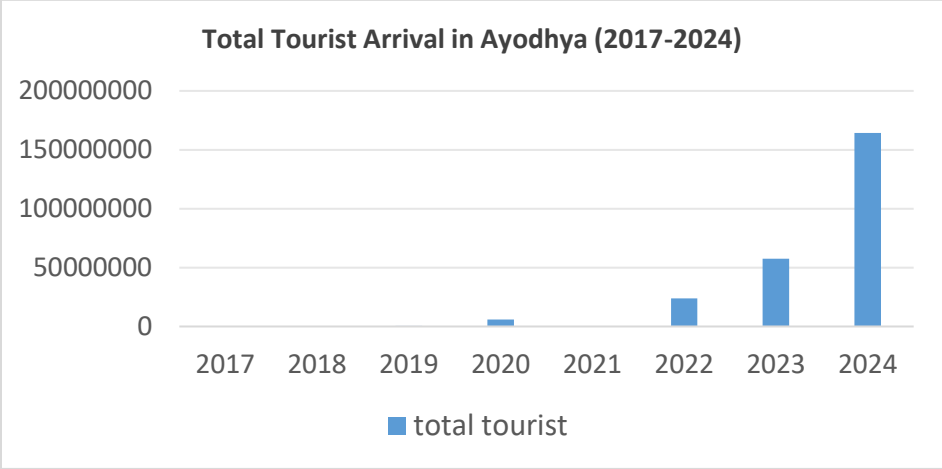


Figure 11. Population Arrival Graph of Ayodhya(2017-2024)

The data shows an exponential surge in 2023 and 2024**,** particularly attributed to the inauguration of the Ram Temple and the increased global and national spiritual focus on Ayodhya (Source: Total Tourist Arrival Chart, 2017–2024). (Annual Report)

2.4.2 Monthly Tourist Statistics in Ayodhya (2023–2024)

In light of the exponential surge in tourist arrivals during 2023 and 2024, particularly driven by the inauguration of the Shree Ram Janmabhoomi Temple, it has become essential to analyze the monthly distribution of tourists in Ayodhya. To gain a deeper understanding of this trend, a segregated analysis of domestic and foreign tourist arrivals has been conducted. This breakdown offers valuable insights into visitor patterns and the growing national and international significance of Ayodhya as a spiritual and cultural destination.

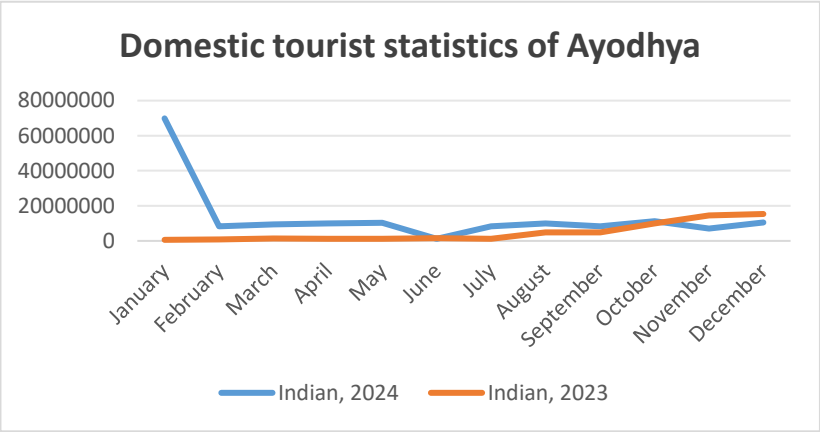


Figure 12. Domestic Tourist Arrival Month wise Graph of 2023 and 2024

Domestic Tourists

- **2023** saw a steady rise in Indian tourist numbers, peaking in December (~1.5 million), aligning with festivals and cooler weather.
- **2024** witnessed an extraordinary surge in January (~70 million) due to the Ram Temple inauguration on January 22, followed by a sharp drop in February.
- From March to December 2024, the numbers stabilized, consistently exceeding 2023 levels, reflecting overall growth in domestic tourism. (TOURISM, 2025)

Key Insight: January 2024 marked an unprecedented spike, while the rest of 2024 showed sustained domestic interest in Ayodhya.

Foreign Tourists

- **2023** had low foreign arrivals, generally under 1,000/month, with minor increases in October–December.
- **2024** showed marked growth: a noticeable spike in January (over 1,000), with numbers remaining higher than 2023 across most months.
- A strong upward trend emerged in the last quarter, peaking at nearly 14,000 in December 2024. (TOURISM, 2025)

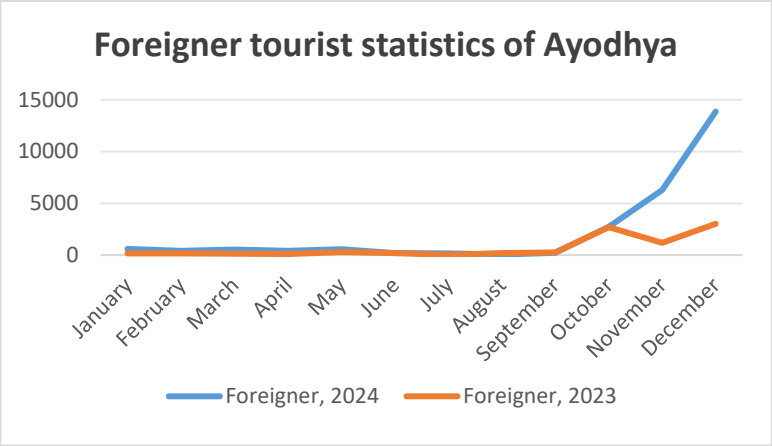


Figure 13. Foreigner Tourist Arrival Month wise Graph of 2023 and 2024

Key Insight: 2024 saw Ayodhya's emergence as an international spiritual destination, with the Ram Temple playing a major role in global attention.

Ayodhya experienced a historic boom in domestic tourism in January 2024**,** and a consistent rise in foreign visitors throughout the year. The data highlights Ayodhya's transformation into a premier national and emerging international pilgrimage hub post-Ram Temple inauguration

2.4.3 Comparative Tourist Footfall in Varanasi, Ayodhya, and Prayagraj

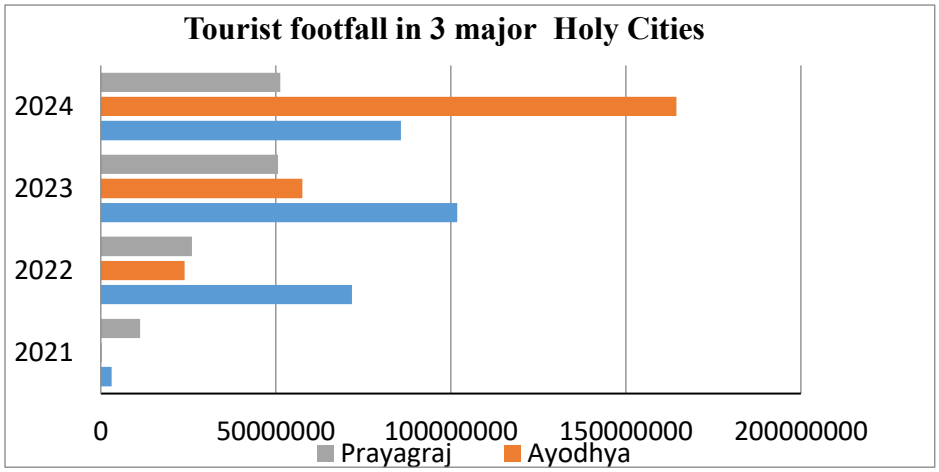


Figure 14 . Tourist footfall in Vranasi, Ayodhya and Prayagraj (2021-2024)

- **2021–2022**: Varanasi maintained higher tourist numbers than Ayodhya.
- **2023**: Ayodhya began matching Varanasi's footfall.
- **2024**: Ayodhya surpassed both cities, becoming the top destination with over **164** million visitors.((Department of Uttar Pradesh State Tourism Development Corporation, 2025)

This upward trend is clearly tied to religious tourism, post-COVID mobility rebound, and landmark developments like the Ram Mandir

2.4.4 Seasonal Variation in Tourism in Ayodhya

Tourism in Ayodhya exhibits marked seasonal fluctuation**,** with peaks aligning with festivals and religious events. (Ayodhya Dham, 2024)High influx periods are recorded in:

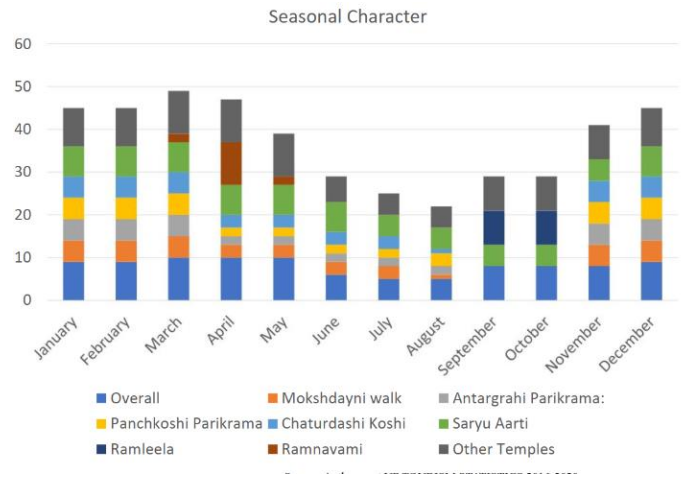


Figure 15. Seasonal Character of Ayodhya city (Month wise graph)

a. **March–April**: Panchkoshi Parikrama, Ram Navmi
b. **October–November**: Deepotsav, Diwali
c. **December–January**: Ram Leela, Makar Sankranti celebrations

The events that draw significant crowds include:Ram Leela**,** Ram Navmi**,** Hanuman Jayanti**,** Deepotsav**,** Ramaayan Mela**,** Sarv Snaan during specific religious periods

Monthly bar graphs show the dominance of Mokshdayini walks, temple visits, parikrama**,** and Ramlila performances as crowd pullers during specific calendar months (Source: Seasonal Variation in Tourism Graph & Event Listings).

Chapter -3
Evaluation of Existing Conditions

The evaluation of Ayodhya's tourism infrastructure is guided by a set of control parameters, which provide a comprehensive lens to analyze current conditions, identify gaps, and recommend improvements. The following chart illustrates the core control parameters, their data sources, and the tools and techniques used for analysis.

3.1 Control Parameters and Tools & Techniques

The control parameters act as the backbone of the assessment framework. (FINAL REPORT ON 20 YEARS PERSPECTVIE PLANS FOR UTTAR PRADESH)These are categorized into nine key areas as shown below:

Table 6 . Control Parameters and sub-Parameters

Control Parameter	Indicative Sub-Parameters	Source of Information
1. Tourist Spot	Footfall, site condition, accessibility, tourist capacity	Primary site surveys, GIS maps, Tourism Dept. reports
2. Demography Profile	Population growth, floating population, literacy rate, workforce engagement	Census data, Municipal records
3. Accommodation	Hotel capacity, types of stay (hotels, dharamshalas, homestays), occupancy rate	Field survey, Tourism registry data
4. Transportation	Connectivity (rail/road), public transport availability, last-mile access	Urban Transport Plan, RTO data, visual surveys
5. Waste Management	Waste generation, collection frequency, treatment and disposal systems	Nagar Nigam records, Environmental health reports
6. Basic Amenities	Toilets, drinking water, signage, electricity, first-aid facilities	Field observations, Infrastructure maps
7. Cultural Connection	Religious and cultural events, historic relevance, pilgrim practices	UNWTO reports, archival records, expert interviews
8. Tourism Issues	Congestion, pollution, crowd control, pricing, seasonality challenges	Tourist and local surveys, SWOT workshops
9. Community Engagement	Local employment in tourism, stakeholder perception, tourism-related businesses	Interviews, local economic data, NGO reports

Tourism Infrastructure Analysis Process

After collecting data, the following steps were taken to analyze existing infrastructure and tourist conditions:

1. **Tourist and Local Survey Response Analysis**:Quantitative and qualitative insights from surveys to evaluate satisfaction, needs, and concerns.
2. **GIS Mapping Analysis**:Spatial mapping of tourist hotspots, infrastructure distribution, and accessibility layers.
3. **Demand & Supply Gap Analysis**:Comparison of tourist demand (accommodation, transport, amenities) with the current infrastructure capacity.
4. **SWOT Analysis**:Identification of strengths, weaknesses, opportunities, and threats related to each parameter to find actionable insights.

Tools & Techniques Used for Analysis

Table 7. Tools and Techniques used for Analysis

Category	Tools & Techniques
A. Data Collection Methods	Surveys (tourists, locals, business owners), field observations, expert interviews, GIS Mapping
B. Analytical Techniques	SWOT Analysis, Gap Analysis (demand vs. supply), Carrying Capacity Assessment, issue identification
C. Planning & Policy Tools	Urban Simulation Models, UNWTO Sustainable Indicators, Strategic Action Plan Frameworks

These tools collectively support both qualitative and quantitative assessment of the tourism infrastructure and help form the basis for strategic recommendations.

3.2 Tourist spots of Ayodhya

Ayodhya, located in Uttar Pradesh, is one of the seven most sacred cities in Hinduism (Sapta Puri). Revered as the birthplace of Lord Ram, the city holds immense spiritual, cultural, and historical value. With its rich tapestry of temples, ghats, and ancient relics, Ayodhya attracts pilgrims, historians, and spiritual seekers from across the world.

Importance of Ayodhya in Hindu Pilgrimage Tourism

Ayodhya plays a central role in Hindu pilgrimage circuits. It is deeply embedded in the Ramayana and regarded as a key site for Ram devotees. The city is home to many significant religious sites including Ram Janmabhoomi, Hanuman Garhi, Kanak Bhawan, and Nageshwarnath Temple. (Ayodhya Ram Mandir: History, Architecture and Significance, 2024) It sees a surge in pilgrim traffic during major festivals like Ram Navami, Diwali, and Kartik Purnima, making it a focal point of spiritual tourism in India. (Ayodhya: The tale behind Rama Janmabhoomi Mandir, 2024)

In recent years, Ayodhya has witnessed transformative growth, most notably the inauguration of the Ram Temple in January 2024, which triggered a historic surge in tourist arrivals. In addition, significant infrastructural developments have been made, such as the expansion of roads, modernization of Ayodhya Dham Railway Station, development of Ayodhya Airport (Maryada Purushottam Shri Ram International Airport), enhanced sanitation and public amenities, and integrated urban planning to support religious tourism sustainably.

3.2.1 Classification of Tourist Spots in Ayodhya

Ayodhya, as a historic and spiritual city, hosts a diverse range of tourist attractions that cater to religious pilgrims, cultural enthusiasts, history seekers, and modern tourists alike. To better understand and manage its growing tourism landscape, Ayodhya's tourist spots can be classified based on their functional type, religious significance, visitor popularity, and development potential. (Ayodhya Ram Temple: A Symbol of Faith and Cultural Heritage, 2024)

This classification broadly divides Ayodhya's destinations into categories such as: Core Religious Sites**,** Ghats and Sacred Riverfronts**,** Cultural and Heritage Locations**,** Festival-

Based Sites**,** Lesser-Known Religious Spots with historical or mythological importance, Natural and Scenic Areas**,** and Modern or Upcoming Tourism Infrastructure**.** (Verma, 2024) (Dr. Mahesh B. Lavate, 2024)

This structured classification helps planners, visitors, and policymakers to identify tourism strengths, gaps, and opportunities across Ayodhya's urban and sacred geography.

Table 8. Tourist Spots Classification

Category	Name of the Tourist Spot	Significance	Type	Tourism Popularity	Tourism Potential
Religious – Core	Ram Janmabhoomi	Birthplace of Lord Ram; major pilgrimage center	Religious	Very High	Developing
	Hanuman Garhi	Historic temple dedicated to Lord Hanuman	Religious	Very High	Well Established
	Kanak Bhawan	Temple associated with Sita and Ram's coronation	Religious / Cultural	High	Medium to High
	Nageshwarnath Temple	Founded by Kush, son of Ram	Religious / Heritage	Medium	Medium
Religious – Ghats	Ram Ki Paidi	Sacred bathing ghats along the Sarayu River	Religious / Spiritual	High	Medium (scope for development)
	Guptar Ghat	Site where Lord Ram took Jal Samadhi	Religious / Scenic	Medium	Medium to High
Cultural / Heritage	Treta Ke Thakur	Temple marking Ram's Ashwamedha Yajna	Cultural / Religious	Medium	Medium
	Raja Dashrath Mahal	Believed to be the residence of King Dashrath	Cultural / Mythological	Medium	Medium
	Valmiki Ramayan Bhavan	Cultural interpretation center on Ramayan	Cultural / Educational	Low to Medium	High (potential learning center)
Festive Hotspots	Ram Leela Grounds	Annual Ram Leela performances	Cultural Event Location	High (seasonal)	Medium
	Deepotsav Venues	Location for record-breaking diya lighting	Event Space / Festival	Very High (seasonal)	High

		during Diwali			
Less Known Religious	Lakshman Qila	Dedicated to Lord Lakshman	Religious / Historical	Low	Medium
	Bharat Kund (Nandigram)	Meditation place of Bharat during Ram's exile	Religious / Peaceful	Low	Medium
	Sita Kund	Sacred spring associated with Sita	Religious / Natural	Low	Medium
	Mani Parvat & Sugriv Parvat	Mythological mounds linked to Ramayana events	Religious / Natural	Low	High (spiritual trekking potential)
Museums & Institutions	Ram Katha Museum	Exhibits on Lord Ram's life and Indian epics	Museum / Educational	Medium	High (cultural interpretation hub)
Natural & Scenic	Sarayu Riverfront Development	Scenic & spiritual value; now redeveloped for tourism	Natural / Religious	High	Very High
Upcoming / Modern	Ram Temple Complex (Phase-II expansion)	Multi-modal spiritual and tourism center	Religious / Modern	Emerging	Very High
	Ayodhya Haat & Light & Sound Show	New infrastructure for tourists and pilgrims	Recreational / Cultural	Emerging	High

Tourism Popularity refers to the present level of tourist interest and footfall at each site, while *Tourism Potential* reflects the site's capacity for future development, enhancement of visitor facilities, and overall accessibility.

Sources:

The classification and analysis are based on data and insights from the Uttar Pradesh Tourism Department (UPTD), Ayodhya Development Authority Reports (2023–2024), the Ministry of Tourism, Government of India, as well as field observations and direct tourist feedback surveys.

visual representation of the tourist spot distribution in Ayodhya**,** classified not by population density of the surrounding areas, but by the volume of tourists visiting each specific site**.**

Key base map features include major roads (black lines), local streets (grey), railway tracks (cross-hatched lines), and water bodies like the Saryu River (light blue). A light purple boundary denotes the administrative area of "Ayodhya_Village," highlighted in the map as a light blue polygon.

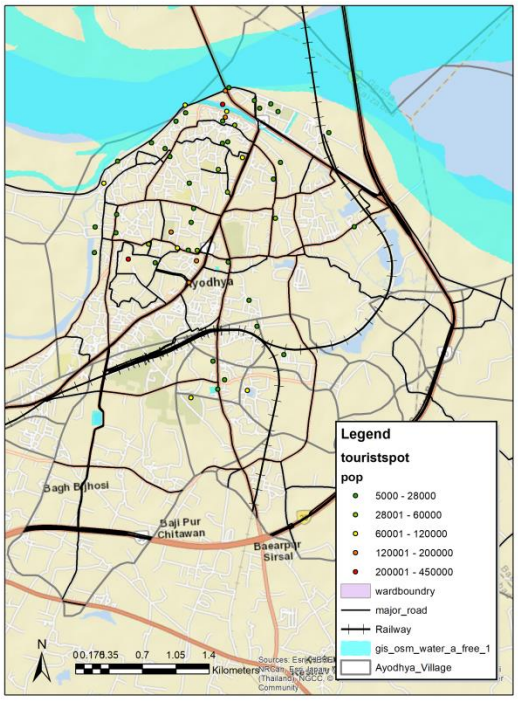


Figure 16. Tourist Spot Map (Source-Author)

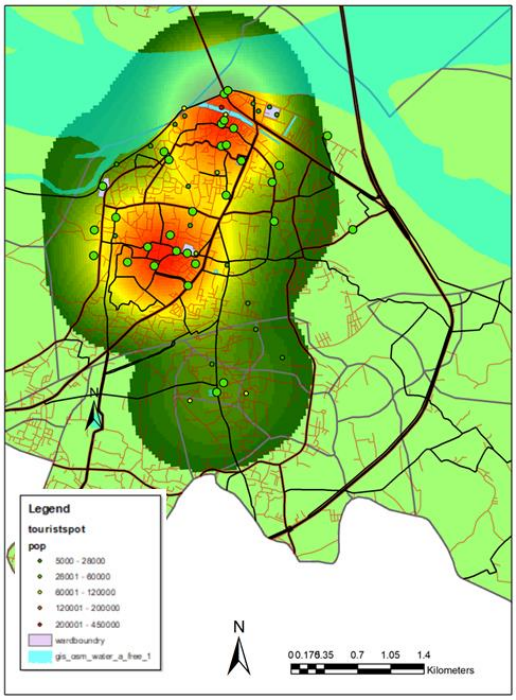


Figure 17. Tourist spot pressure map

The color-coded classification helps identify the relative popularity and tourist surge experienced at each location.

Table 9. Tourist Volume Range detail

Color	Tourist Volume Range	Description
Red	200,001 – 450,000 tourists	Sites experiencing **very high tourist surge** — e.g., Ram Temple complex.
Orange	120,001 – 200,000	**High visitation**, possibly key temples or riverfront zones.
Yellow	60,001 – 120,000	**Moderately high** footfall, often prominent but less central sites.
Light Green	28,001 – 60,000	**Medium tourist volume**, often heritage or secondary religious sites.
Dark Green	5,000 – 28,000	**Lower footfall**, often less known, peripheral, or emerging destinations.

Interpretation and Key Observations

a. **Central Hub**: The map highlights red and orange markers concentrated in central Ayodhya, indicating a high-intensity tourism zone, with Ram Janmabhoomi likely contributing the highest footfall.
b. **Peripheral Spread**: **Green dots** dominate the outskirts, representing lesser-known or developing tourist spots with lower visitor volumes.
c. **Infrastructure Influence**: The location of high-footfall sites near major roads and railway lines reinforces the impact of accessibility on tourist behavior.
d. **Planning Insight**: By using tourist volume as a classification metric, the map offers valuable insights for tourism infrastructure planning, highlighting zones needing better facilities or decongestion measures.

3.2.2 Visitor Experience and Feedback

The profiles, motivations, and experiences of tourists visiting Ayodhya, derived from primary survey data. The aim is to offer a data-backed understanding of the city's tourism dynamics. Survey Scope:The data is based on a survey of 108 respondents (52 residents and 56 tourists) conducted across 14 wards. The survey focused on basic services and challenges faced by both tourists and residents.

Gender Distribution:

- **Male: 55.2% | Female: 44.8%**
- **Insight:** the gender distribution of the survey respondents. It indicates that a slightly higher proportion of males (55.2%) participated in the survey compared to females (44.8%). Insight: This suggests that the tourist demographic might lean slightly towards male visitors.

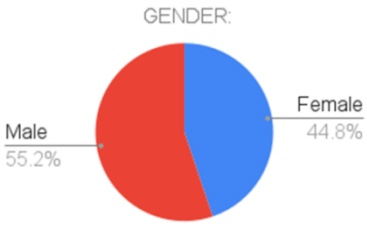


Figure 18. Percentage of Male and Female : Approach for survey

Frequency of Visits:

- **First-time visitors dominate**, with few regular or occasional visitors.
- **Insight:** The overwhelming majority are "First time" visitors, followed by "Occasionally," and a small number of "Regular Visitor." Insight: This indicates that Ayodhya is primarily a destination for new visitors.

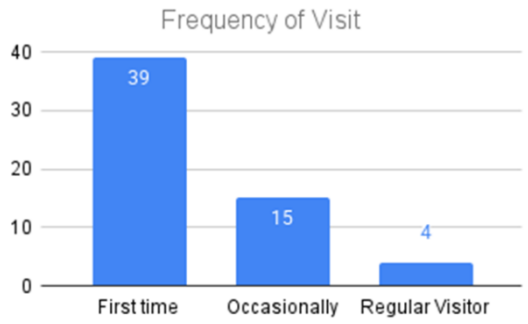


Figure 19. Survey Response: Frequency of Visit

Tourist Age Group:

- Highest: **26–35 years**, followed by 36–50.
- **Insight:** the age distribution of tourists."The dominant age group is 26-35, indicating that young and middle-aged adults form the core visitor segment."

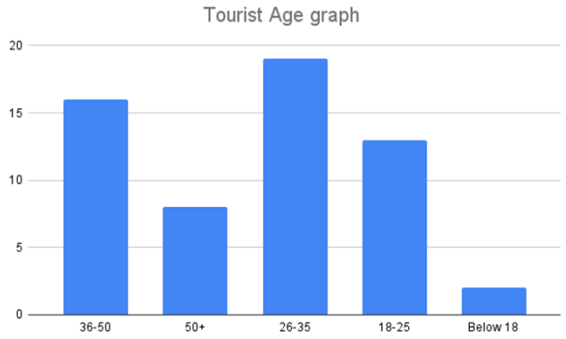


Figure 20. Survey Response: Tourist Age Graph

Purpose of Visit:

- **Religious visits dominate**, with minor numbers for business and leisure.
- **Insight:** Reinforces Ayodhya's status as a spiritual destination.
- "The main reason for visiting is religious, affirming Ayodhya's status as a significant spiritual hub." This confirms Ayodhya's identity as a pilgrimage destination.

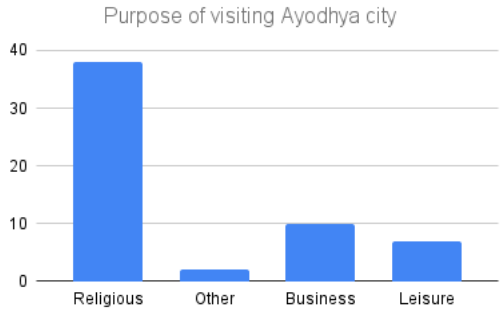


Figure 21. Survey Response: Purpose of Visit

Cities Visited Before/After Ayodhya

- Popular nearby cities: **Lucknow, Prayagraj, Varanasi/Kashi**.
- **Insight:** Ayodhya is part of a wider pilgrimage circuit, with strong regional tourism linkage.

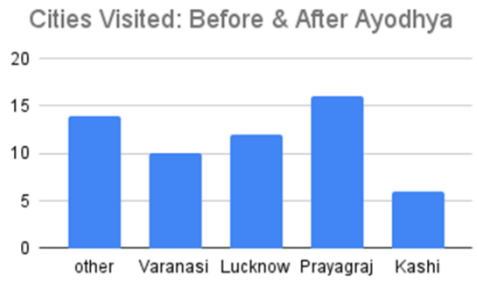


Figure 22. Survey Response: City Before and After Ayodhya

Internet Connectivity:

- Ratings mostly between **3 to 5** on a 5-point scale.
- **Insight:** Generally good connectivity, important for navigation, bookings, and experience sharing.

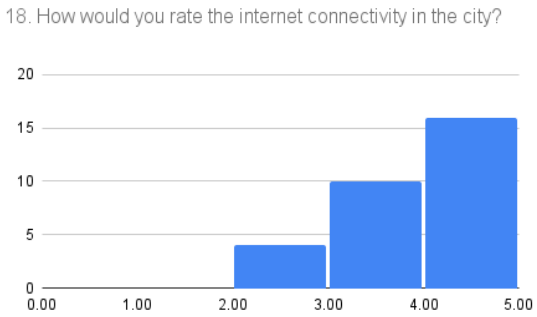


Figure 23. Survey Response: Internet Connectivity in the City

Perception of Crowding:

- Most rated **"Very well managed crowd"**, followed by "Quite crowded."
- **Insight:** Crowd management is perceived as largely positive, though improvements can still be made.

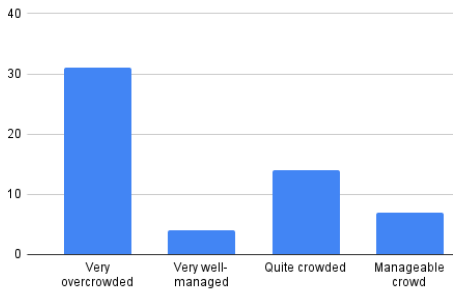
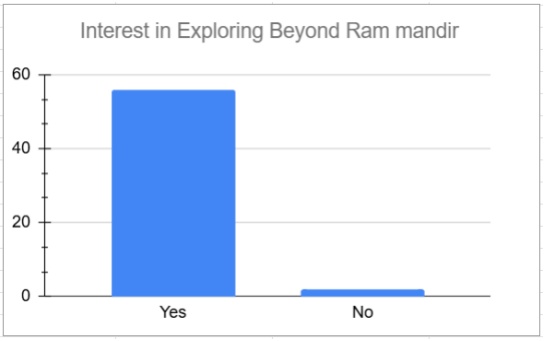


Figure 24. Survey Response: Crowd Management

Interest in Exploring Beyond Ram Mandir:

- Overwhelming **"Yes"** response.
- **Insight:** Strong potential to promote lesser-known attractions and cultural activities. ***Figure 25. Survey Response: Interest in Exploring Ayodhya***



Interest in Visiting Lesser-Known Places

Top motivators: **Guided walks**, followed by storytelling, peace, and cleanliness.**Insight:** Structured tours and rich narratives can encourage exploration of under-visited sites.

Figure 26. Survey Response: what makes them to Visit Lesser-Known Places

Local Business Impact:

- **Yes: 88.5% | No: 11.5%**
- **Insight:** Most agree tourism is benefiting local businesses economically.

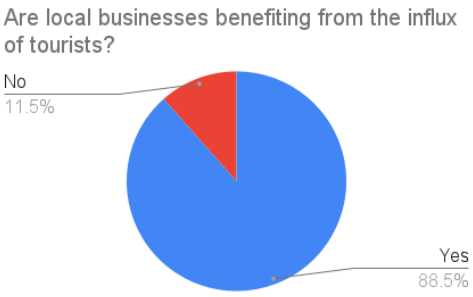


Figure 27. Survey Response: Visit Lesser-Known Places

Job Opportunities from Tourism:

- **Yes: 82.7% | No: 17.3%**
- **Insight:** Tourism is seen as a source of employment growth for locals.

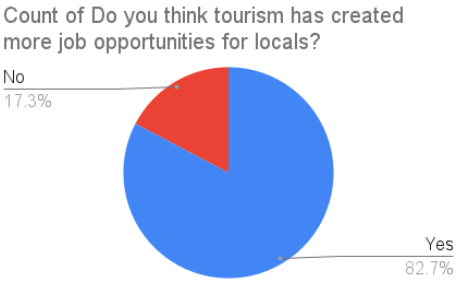


Figure 28. Survey Response: Job Opportunities for Locals

Tourism is contributing positively to the **local economy and job creation**

3.3 Accommodation and tourist perspective

1. Hotel Density and Distribution:

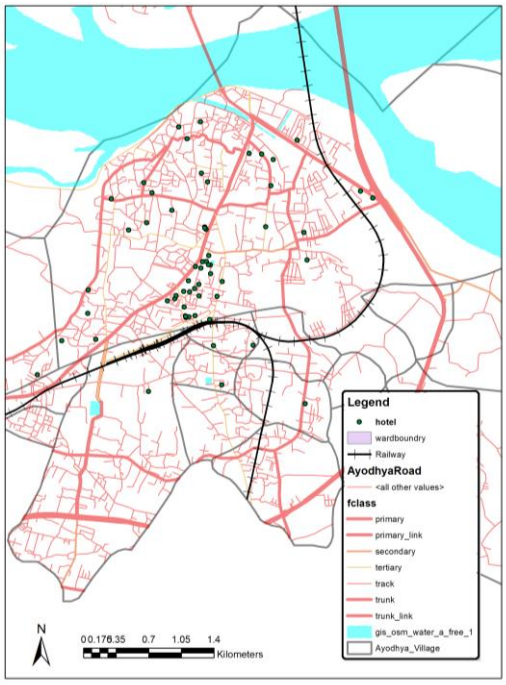


Figure 29. Hotel Location map (Source-Author) *Figure 30. Hotel Density map*

The hotel density map of Ayodhya reveals a strong concentration of hotels in the central part of the city.(UPSTDC,2024)

Areas with higher hotel density are illustrated by dark brown shades, suggesting awell-established hospitality infrastructure in these regions.

2. Hotel Market Dynamics (Peak vs. Non-Peak Season):

The table below illustrates the significant increase in hotel rates during peak season (May 2024 approximation) compared to non-peak season (January 2024 approximation):

Table 10. Hotel Cost Dynamics

Hotel Name	JAN 2024 (Approx. rate)	MAY 2024 (Approx. rate)
Hotel Human Ji	~₹8,000	~₹1,500
Hotel Neelkanth	~₹10,000	~₹1,750

Hotel Ayodhya Palace	~₹16,000	~₹3,750
KK Hotel	~₹20,500	~₹8,000

- **Inference:** Ayodhya's hotel market experiences pronounced seasonality, with average tariffs increasing by 50% to 70% during peak season. This indicates high demand during certain periods, likely driven by religious or cultural events.

3. Tourist Accommodation Experience & Preferences:

Difficulties in Finding Suitable Lodging:

43% of visitors face difficulties in finding suitable lodging.55% of visitors do not experience difficulties.2% of visitors are unsure.

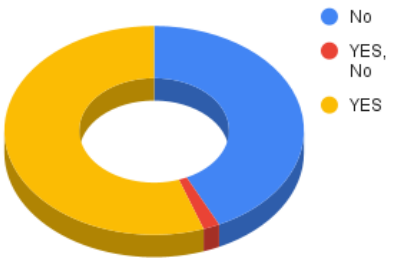


Figure 31. Survey Response: Difficulty in Finding Suitable Lodging

Distance preferred from city center: most of the people prefer accommodation near city center area or city core. Under 0-4 Km preferred by 53.4%

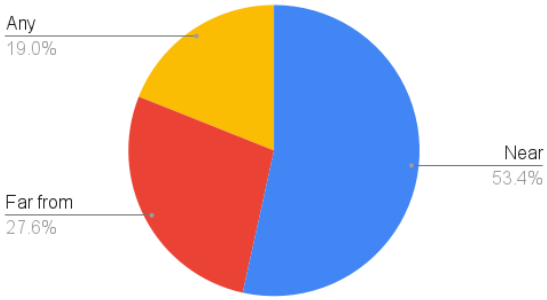


Figure 32. Survey Response: Distance Preferred from City Center

Accommodation Experience Rating (on a scale of 1 to 5.50): The distribution suggests a varied experience, with a notable peak around the 4.00-5.00 range, indicating generally satisfactory but not uniformly excellent experiences.

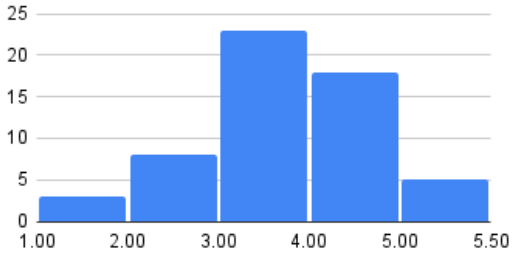


Figure 33. Survey Response: Accommodation Experience Rating

Pricing Satisfaction:

Reasonable: A significant portion of tourists find pricing reasonable.

Not reasonable: A smaller but considerable portion finds pricing not reasonable.

Partially reasonable: Some find pricing partially reasonable.

Figure 34. Survey Response: Price Satisfaction

Specific Challenge: While 43% of visitors face difficulties in finding lodging, over half prefer accommodations close to religious/tourist sites. This highlights a desire for convenience and proximity to key attractions.

Key Takeaways and Weak Points Identified:

- **Average Takeaways:**
  - Tourists want accommodations near key sites.
  - Most prefer reasonable pricing but still face barriers.
  - Enhancing infrastructure, crowd management, and lodging will improve satisfaction and potentially extend stays.
- **Weak Points Identified:**
  - Short stays reflect limited engagement, possibly due to accommodation issues or lack of diverse activities.
  - 43% of tourists struggle with lodging access, indicating a significant supply-demand imbalance or issues with discoverability.
  - Accommodation pricing and quality are only moderately rated, suggesting room for improvement in both aspects.

5. **Average Duration of Stay and Key Drivers:**

Table 11. Average Duration of Stay(2015-2025)

Year	Average Duration of Stay	Key Drivers
2015-2018	3-5 hours	Primarily day visits; pilgrimage focus only on Ram Janmabhoomi.
2019-2022	~1-1.5 days	Start of major projects (airport, temple construction); Early tourist facilities.
2023-2025	2-4 days	Ram Mandir opening; better hotels, guided tours, religious circuits.

This table demonstrates a significant increase in the average duration of stay for tourists in Ayodhya over the past decade. Initially, visits were brief, centered around the Ram Janmabhoomi. (Anushree, 2025) The commencement of major infrastructure projects and the opening of the Ram Mandir, coupled with improved hospitality options, have led to tourists staying longer, indicating a shift towards a more comprehensive tourist experience. The "Stay Duration" bar chart further visually supports this trend, showing a clear increase in the number of tourists staying for 2-4 days. (Ayodhya)

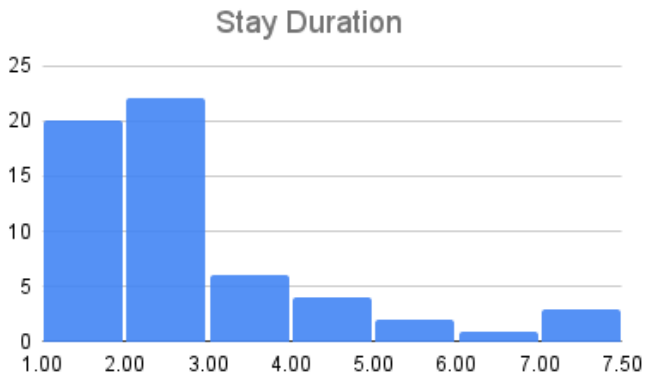


Figure 35. Survey Response: Stay Duration

6. **Tourist Travel and Spending Habits:**
    a. **Travel Mode:** Tourists primarily travel and spend time in the city, with a significant portion arriving by train, reflecting Ayodhya's reliance on rail networks.

b. **Typical Stay:** Visitors typically stay for 2 to 4 days, aligning with the "Average Duration of Stay" data for 2023-2025.

c. **Daily Expenditure:** The "Daily Expenditure" bar chart indicates that a substantial number of tourists spend between ₹1,000 and ₹5,000 daily, followed by expenditures in the ₹5,000-₹10,000 range. This suggests a varied spending pattern among tourists, with a considerable segment falling into the mid-range expenditure bracket. (SINGH, 2024)

6. Ayodhya's Tourism Surge and Real Estate Appreciation:

a. **Tourism Growth:** Ayodhya's tourism is experiencing a surge, fueled by increasing visitor numbers and exceptional land appreciation. (Sawhney, 2024)

b. **Real Estate Impact:** The real estate market has witnessed unprecedented land value appreciation, transforming it into a high-potential destination for both spiritual tourism and long-term investment. (Ar. Sayan Munshi, 2022)

c. **Projected Growth:** Investment in Ayodhya is projected to grow at an impressive Compound Annual Growth Rate (CAGR) of 19%, with an estimated 25% increase by 2035.

7. Average Rate in Relation to Shri Ram Janmabhoomi Mandir:

Table 12. Average Rate Dynamics by distance from Ram Janmabhoomi Mandir

Location	2020 (PSF INR)	2025 (PSF INR)	Value Appreciation
0-4 Km	₹2,500 - ₹3,200	₹12,600 - ₹15,500	4.3 X
4-8 Km	₹1,600 - ₹2,100	₹7,160 - ₹9,200	4.2 X
Rest of city	₹850 - ₹1,050	₹3,520 - ₹4,400	**4.1 X**

This table highlights the dramatic increase in property values (per square foot) in Ayodhya, particularly in areas closer to the Shri Ram Janmabhoomi Mandir. The value appreciation is consistently high across all distances, but the highest absolute values are observed within the 0-4 km radius, underscoring the premium placed on proximity to the temple. The map provides a visual context for these distances from the Mandir.

8. Hotel Presence in Different Budget Categories:

Table 13. Hotel Type and Number of Hotel Available

Hotel Type	No of Hotels	Estimated Room	Remarks
5-Star & Luxury Hotels	1	80-100	Limited availability of high-end accommodations.
4-Stars Hotels	5	220-250	Moderate availability.
3-Star Hotels	17	500-600	Good mid-range availability.
Budget Hotels & Guesthouses	64 properties*	1,200-1,500	More widely available.
Dharamshalas / Ashrams	167 properties*	~3,500	Mostly Active during pilgrim season.
Total	**254**	**5,500-5,950**	

This table provides a detailed breakdown of the accommodation landscape in Ayodhya by hotel type and estimated room count. It indicates a clear dominance of budget hotels and guesthouses, along with a significant number of Dharamshalas/Ashrams, catering primarily to pilgrims. The limited number of 5-star and 4-star hotels suggests an opportunity for growth in the luxury and upscale segments, especially as the average duration of stay increases and more diverse tourists are attracted. The total number of properties and estimated rooms provide a snapshot of the current capacity. (Ayodhya A Rising Global Spiritual Capital, 2024)

3.4 Transportation and Urban Management

1. Road Network Map:

This map illustrates the classification of roads in Ayodhya, including primary, secondary, tertiary, trunk, track roads, and railway lines.

The distribution shows a well-connected core with branching roads reaching peripheral areas. This helps understand the city's road hierarchy and travel pathways, which is crucial for efficient movement within the city.

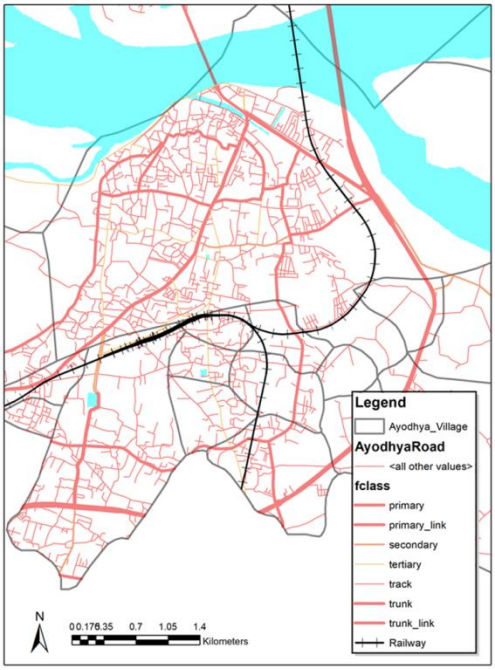


Figure 36. Road and Rail Network map (Source-Author)

2. Road Buffer & Tourist Spots:

This map visualizes buffer zones around roads based on distance. The green dots show that most major tourist attractions lie within 100 meters of key roads.

This proximity to key roads indicates good roadside visibility and access, which is crucial for tourist convenience and planning wayfinding signage and infrastructure. It suggests that major attractions are easily reachable from the main road network.

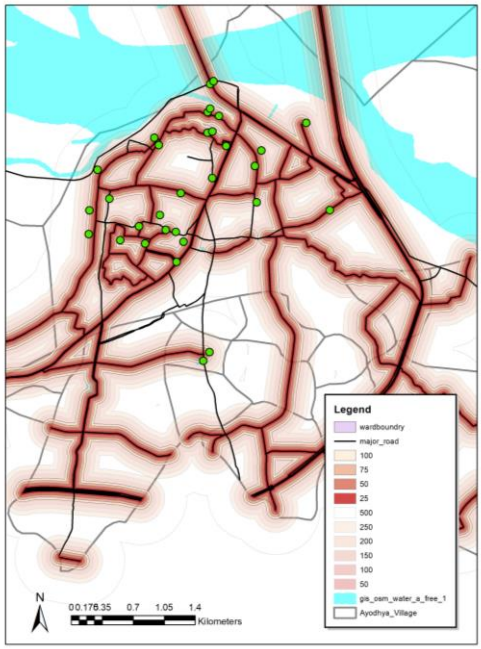


Figure 37. Road Buffer and Tourist spot map (Source-Author)

3. Accessibility Map:

This map assesses accessibility levels across the city based on proximity to major roads. Dark green areas represent zones that are highly accessible, while yellow to red areas show decreasing accessibility.

The central region is most accessible, while the southern and far eastern areas are less connected. This highlights disparities in accessibility within the city, with the core being well-served and peripheral areas requiring improved connectivity.

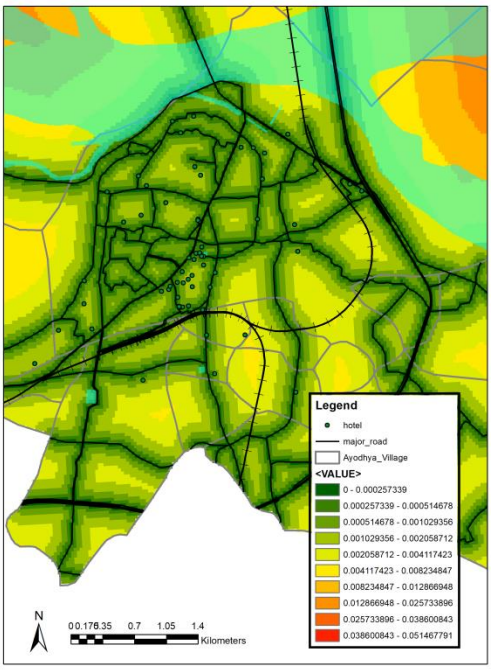


Figure 38. Road Accessibility Map (Source-Author)

4. Public Transportation, Road Conditions & Traffic Issues:

Public Transportation Availability:

The bar chart shows varying ratings for public transportation availability, with a peak around 4.00-4.50, indicating moderate satisfaction but also areas for improvement.

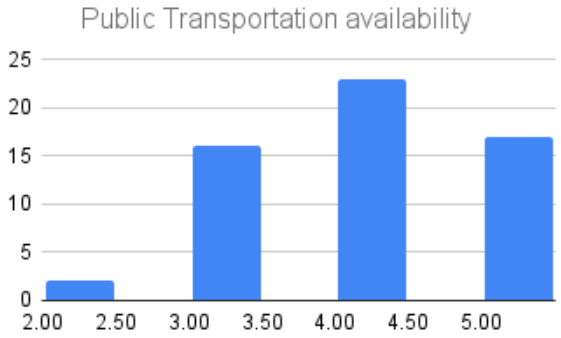


Figure 39. Survey Response: Public Transportation Availability

Roads and Transport Condition: Similarly, the bar chart for roads and transport condition shows a distribution, suggesting mixed opinions on the quality of roads and overall transport infrastructure.

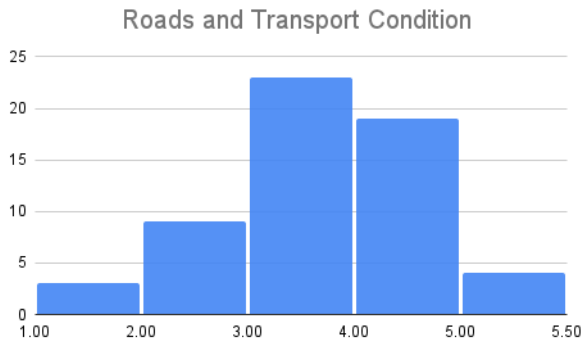


Figure 40. Survey Response: Roads and Transport Condition

Traffic and Congestion Management: The ratings for traffic and congestion management also vary, indicating that this is an area where tourists experience issues.

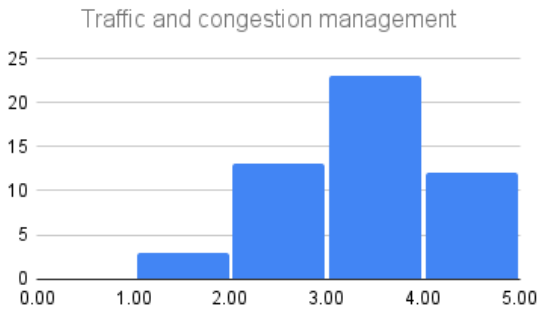


Figure 41.Survey Response: Traffic and Congestion Management

5. Common Issues & Weak Points Identified:

Weak Points Identified:

Overcrowding (75.9%) is the top concern: This is identified as the most reported issue by tourists.

Traffic and transport dissatisfaction persists: This suggests that despite efforts, the current infrastructure struggles to cope with the influx of tourists and vehicles.

Common Issues Pie Chart: The pie chart visually confirms that "Overcrowding" constitutes the vast majority (75.9%) of common issues reported, followed by "Theft," "Scams," and "Other" minor concerns.

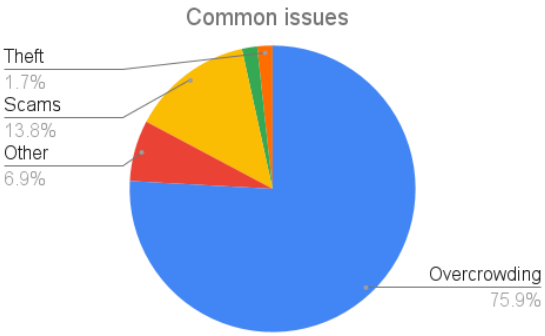


Figure 42. Survey Response: Common Issues

6. Tourist Feedback & Inference:

- **Tourist Feedback:** Tourists give average ratings to public transport and road conditions and express moderate dissatisfaction with traffic and congestion at tourist sites.
- **Inference:** Infrastructure struggles—especially traffic and crowd control—diminish the overall tourist experience and need urgent attention. The high percentage of dissatisfaction due to overcrowding underscores the critical need for comprehensive urban planning and management strategies to address these challenges. This includes improving public transport efficiency, optimizing traffic flow, and implementing effective crowd control measures, especially in high-density tourist areas.

Arrival Distribution by Transport Mode:

Table 14.Percentage of Transport mode prefer by Tourist

Mode	Percentage	Reasoning
Train	45%	Rail is the most affordable & widely used option in Ayodhya.
Bus	23%	UPSRTC and private buses are commonly used by pilgrims & group travelers.
Car/Taxi	18%	Many domestic tourists from nearby cities drive or hire taxis.
Airplane	8%	Airport became operational in late 2023; growing but still developing.
Other	6%	Auto/e-rickshaws, and two-wheelers used mainly by nearby visitors.

This section, supported by the pie chart, clearly shows that train is the dominant mode of arrival for tourists in Ayodhya, accounting for almost half of all arrivals. This is primarily due to its affordability and widespread use. Buses are also a significant mode, especially for group travel. The relatively recent operational status of the airport explains the lower percentage for air travel, but it is expected to grow. The "Other" category includes local modes of transport for short-distance visitors.

2. Tourism Load on Roads:

The map reveals the impact of tourism on the city's road network. Roads in red experience the highest tourist traffic, primarily in the central and northern zones, and around the main tourist zones (e.g., Main Tourist Zone, Main Hotel Zone, Ram Mandir Entry/Exit, and the road connected to the railway station).

This visual helps in understanding congestion patterns. The areas highlighted in red indicate major bottlenecks and areas requiring significant traffic management interventions. These correspond to key access points and high-density tourist areas, confirming the earlier observations about overcrowding and traffic issues.

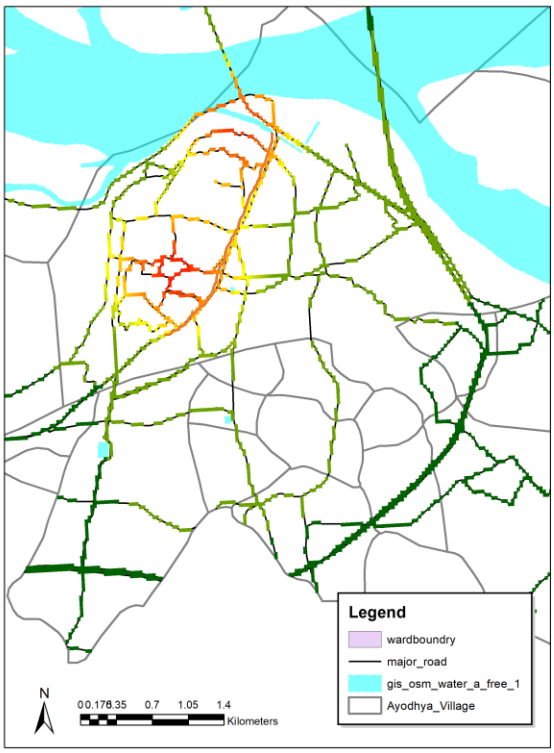


Figure 43.Tourist Load on Road Map (Source-Author)

3. Characteristics of Vehicle Ownership (2016-2019 Analysis):

This analysis focuses on the variable characteristics of ownership, based on the basis of private and commercial owned vehicles.

Table 15. Vehicles Ownership Dynamics(2016-2019)

Types of Vehicles	2016	2017	2018	2019
Bus	107	215	325	418
E-Rickshaw	218	1099	1947	2487
Maxi Cabs	113	255	403	534
Motorcycle	28789	65253	104107	144834
Commercial (LMV)	40	100	138	166
Private car	1670	3821	6057	8232
3-Wheeler Passenger	262	401	789	1461

2-Wheeler (Motorcycle) shows the maximum growth: This indicates the affordability of road transport and its significant popularity. Two-wheelers are the most convenient mode of transport due to the narrow roads.

E-Rickshaw dominates the commercial sector: E-Rickshaws demonstrated significant growth (91% between 2016-19) in the commercial transport sector over Maxi Cabs and other 3-wheelers. This highlights their role in local last-mile connectivity.

Growth in Private Car ownership: Private car ownership shows 80% growth, accounting for 5% of the total number of 2-wheelers. While lower than two-wheelers, this still represents a substantial increase in personal vehicle usage.

Significant modes of Tourism Sector: E-Rickshaws, 3-Wheelers (Passenger), Commercial Light Motor Vehicles (LMV), and Maxi Cabs are identified as significant modes of transport within the tourism sector, serving various needs from individual travel to group movements.

Public transport shows significant growth: The increasing numbers of buses and 3-wheeler passengers (including e-rickshaws) suggest a growing reliance on and expansion of public transport options.

The data highlights a dynamic transportation landscape in Ayodhya, heavily influenced by its growing tourism. While trains remain the primary mode of arrival, local transport like two-wheelers and e-rickshaws are crucial for intra-city movement. The rapid increase in vehicle ownership, particularly two-wheelers and private cars, coupled with high tourist traffic, is leading to significant road congestion, especially around major tourist attractions. (Transport Department, Government of Uttar Pradesh, 2025)

3.5 Waste Management in Ayodhya

Effective waste management is crucial for maintaining Ayodhya's cleanliness and environmental integrity, especially with increased tourist footfall.

1. Waste Generation Overview:

Daily Solid Waste Generation: ~135 tonnes. (DEVELOPMENT, 2016)
Waste Composition: Predominantly wet waste (54.2%) and dry waste (34.5%), with smaller percentages of domestic hazardous (2.8%) and sanitary waste (5.9%).
C&D Waste: 15.14 TPD is also part of municipal solid waste. (MUNICIPAL SOLID WASTE MANAGEMENT MANUAL, 2016)
Waste Segregation: A critical challenge, with only 25% of waste segregated at source.
The high proportion of wet waste suggests a need for robust organic waste processing. The low source segregation rate is a major impediment to efficient recycling and resource recovery.

2. Solid Waste Management Practices:

Door-to-Door Collection: Achieved 100% coverage in all 60 wards, indicating a strong collection network.
Material Recovery Facilities (MRFs): One 5 TPD MRF is operational, with five more 5 TPD MRFs under construction. (Manual on Municipal Solid Waste Management, 2016)
Explanation: While collection is comprehensive, the current MRF capacity is limited compared to the daily generation. The upcoming MRFs will significantly enhance processing capabilities for dry waste.
Legacy Waste Dumping Sites: Six sites exist within 500 meters of the Saryu River, containing an estimated ~2.5 lakh tonnes of legacy waste. (Foundation, 2024)
This poses a significant environmental threat, especially to the river, and requires urgent remediation efforts (bioremediation/landfill mining). The map shows "Waste Generation

Zones" highlighting highest waste generation near Saryu River Ghat areas, likely due to religious activities.

3. Standard Waste Generation (by Land Use Type):

Table 16. Standard Waste Generation by diff. Land use types

STANDARD WASTE GENERATION

Sl No.	Land use type	Estimate waste generation
1.	Residential refuge	0.3 to 0.6 kg/cap/day
2.	Commercial refuge	0.1 to 0.2 kg/cap/day
3.	Street sweeping	0.05 to 0.2 kg/cap/day
4.	Institutional refuge	0.05 to 0.2 kg/cap/day

Residential, commercial, street sweeping, and institutional refuges have varying per capita/per day waste generation rates. (THE SOLID WASTE MANAGEMENT RULES, 2016)

Explanation: This data is vital for forecasting waste generation from different urban activities and planning appropriate collection and treatment infrastructure.

4. Tourist Waste Generation:

Hotel Tourist: 1.0-1.5 kg/day (higher due to packaging, food waste).

Pilgrim/Day Visitor: 0.4-0.6 kg/day (lower due to shorter stays).

Average Tourist: ~0.5-0.7 kg/day (estimated average).

Explanation: Tourists generate a significant amount of waste, particularly hotel tourists due to packaging and food waste. This highlights the need for specific waste management strategies targeting tourist zones and accommodations. (MUNICIPAL SOLID WASTE MANAGEMENT MANUAL, 2016)

Table 17. Waste Generated by diff. Tourist types

Tourist Type	Waste Generation (kg/day)	Source / Notes
Hotel Tourist	1.0–1.5 kg/day	Higher due to packaging, food waste – MoHUA & CPHEEO standards
Pilgrim/Day Visitor	0.4–0.6 kg/day	Lower due to shorter stays – CPCB guidelines
Average Tourist	~0.5–1.0 kg/day	Estimated average in pilgrimage towns

3.6 Tourist Aminities in Ayodhya

1. Water Amenities

Primary Source:

- For the Municipal Area (77.8 sq.km): 31.62 MLD (Million Liters Per Day) from Groundwater (Primary Source- Nagar Nigam Office).
- 8.01 MLD from Handpumps (Secondary Source).

Consumption:

- Total annual water consumption demand met through piped water supply: ~9,975 million litres. (Program Management Unit Ayodhya)
- Domestic sector consumption: 27.33 MLD. (Foundation, 2024)

Water Consumption by Tourist Type:

Table 18. Water Consumption by diff. Tourist types

Tourist Type	Water Consumption (liters/day)	Source / Reference
Hotel Guest (Mid-range)	135–200 L/day	CPHEEO* Manual, MoUD Guidelines, Indian Green Building Code
Luxury Hotel Guest	300–400 L/day	IGBC / International hotel benchmarks
Pilgrim/Day Visitor	60–90 L/day	CPCB, CPHEEO (low usage due to short stays, basic needs)

Water consumption varies by tourist type. Mid-range hotel guests use around 135–200 liters/day, while luxury hotel guests consume significantly more, about 300–400 liters/day due to added amenities. Pilgrims or casual visitors use the least, around 60–90 liters/day, focusing on basic needs.

Average Daily Water Consumption per Tourist in Ayodhya: 80 liters.

Note: For hotel tourists (30%), water use may rise to 150-200 liters/day.

Sources/References for Water Consumption Benchmarks: CPHEEO Manual, MoUD Guidelines, Indian Green Building Code, IGBC / International hotel benchmarks, CPCB, CPHEEO (low usage due to short stays, basic needs).

2. Basic Amenities & Tourist Services

Public Toilets & Sanitation Availability:

Observation: A significant majority (60.3%) of respondents indicate no public toilets and sanitation.

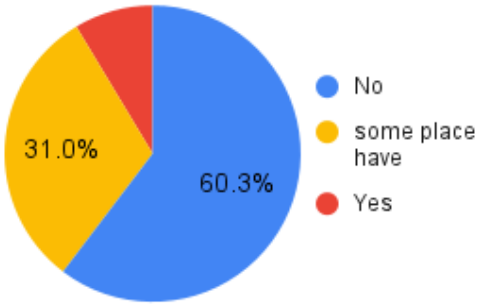


Figure 44 Survey Response: Public Toilet Availability

Drinking Water & Restrooms Availability:

Observation: While over half indicate availability, a substantial portion (32.8%) report no drinking water or restrooms.

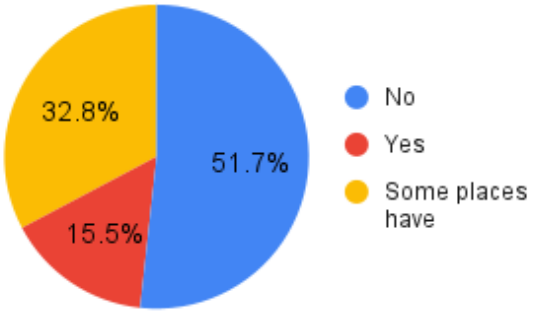


Figure 45. Survey Response: Drinking Water and Restroom Availability

Rating of Services of the Tourist Information Center:

The bar chart indicates that the majority of ratings for the tourist information center services are clustered between 1.00 and 3.00, suggesting average to below-average satisfaction.

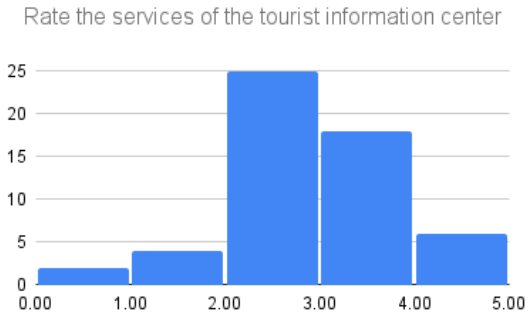


Figure 46. Survey Response: Tourism Information Center Rating

Rate the Seating Facilities Available at the Tourist Spot:

The bar chart shows similar ratings for seating facilities, with a peak around 1.00 and 2.00, implying average to below-average availability or quality.

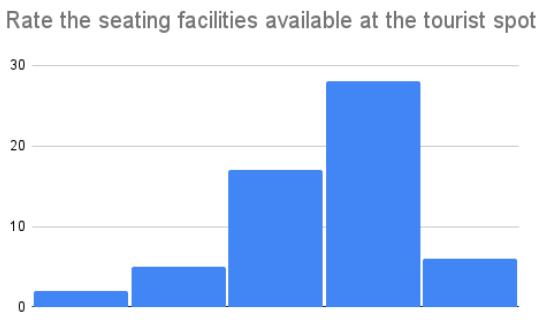


Figure 47.Survey Response: Seating Facilities Available at Tourist Spots

3. Key Findings & Inference

- **Inadequate Sanitation and Drinking Water:** A majority of tourists (60%+) reported inadequate sanitation and drinking water.
- **Below-Average Service Ratings:** Tourist help center services and seating facilities received average to below-average ratings.
- **Inference:** Infrastructure related to comfort and hygiene is severely lacking. Basic facilities must be prioritized to elevate tourist satisfaction.

4. Visuals

- The report includes images depicting: A sign for "शुद्ध पेय जल" (Pure Drinking Water), suggesting an attempt at providing clean water. Images of what appear to be public areas or facilities, possibly showing current conditions.

Figure 48.Visual of Faculties Available Near Ram Temple

Chapter -4
Supply and Demand Analysis

Infrastructure demand refers to the required quantity and quality of infrastructure services needed to support economic activities and the well-being of the population. This encompasses facilities like transportation systems, water supply, energy, and telecommunications. Demand is influenced by factors such as population growth, urbanization, economic development, and technological advancements.

Infrastructure supply denotes the existing capacity and availability of infrastructure services provided by public or private entities. This includes the physical infrastructure, operational efficiency, and maintenance levels. Supply is determined by past investments, current operational capabilities, and policy decisions.

The **demand-supply gap** in infrastructure arises when the existing infrastructure (supply) fails to meet the current or projected needs (demand) of the population and economy. This gap can lead to issues such as congestion, reduced quality of services, and hindered economic growth. For instance, if a city's water treatment capacity is insufficient for its growing population, it results in water shortages and health hazards.

City capacity refers to the maximum level of infrastructure services a city can provide effectively. Assessing this involves evaluating existing infrastructure, projected population growth, and potential economic activities. Tools like Geographic Information Systems (GIS) and urban simulation models are often used for this purpose.

4.1 Accommodation demand and supply gap

"Accommodation Demand and Supply" presents an assessment of Ayodhya’s accommodation capacity relative to the projected tourist demand. The analysis is divided into three parts: Accommodation Supply**,** Accommodation Demand**,** and the resulting Demand-Supply Gap**.**

Accommodation Supply

The "Accommodation Supply" section calculates the total available beds in Ayodhya.

- **Formula:** Beds ≈ Rooms × (average multiplier)
- **Application:** The calculation states "5,500 rooms × 2.5 = 13,750 beds." This implies that Ayodhya has an estimated 5,500 rooms, and each room is considered to accommodate an average of 2.5 persons (the "average multiplier").
- **Result:** The "Available number is quoted around 13,750 beds," which represents the total accommodation supply in Ayodhya.

Accommodation Demand

The "Accommodation Demand" section aims to calculate the required number of room nights and ultimately, the demand for beds per night.

- **Room Demand per night (100% occupancy) Formula:** (Abraham)

$$\text{Room demand per night (100\% occupancy)} = \frac{\text{(no. tourist x \% staying in hotels x average length of stay)}}{\text{(365 x average no. persons per room)}}$$

- **Demand (room nights) Formula:** (T x P x L)/ (S x N) Where:
  - **T (Annual Tourist of 2024):** 16,44,19,522 (This is a very large number, likely representing total tourist footfall, not necessarily unique individuals or hotel stays.)
  - **P (By Primary Data):** 0.7 (This likely represents the percentage of tourists staying in hotels.)
  - **L (Range taken as 1-4 days):** 2.5 (This is the average length of stay in days.)
  - **S (2024 is a Leap Year):** 366 (Number of days in 2024.)
  - **N (by all range of Accommodation facilities):** 2.5 (Average number of persons per room across all accommodation types.)
- **Calculation:** The image shows the following calculation:

  16,44,19,522×0.7×2.5/366×2.5 = 28,77,34,163.5/915

This simplifies to: **Room Demand per Night = 3,14,463.5**

- **Summary Table for Demand:** The table summarizes the demand calculation:
  - **Category:** Hotel Beds
  - **Available Capacity (Supply):** 13,750 beds (This is the supply calculated earlier)
  - **Average Tourist per Day:** 4,50,000 Approx. (Calculated as 16,44,19,522 / 366)
  - **Demand for Beds:** 3,14,463.5 (The "Room Demand per Night" calculated above)

Accommodation Demand-Supply Gap

To determine whether Ayodhya's current accommodation is sufficient, the demand is compared with the available supply.

- **Formula**: Gap=Demand for Beds−Available Supply
- **Calculation**: 3,14,464−13,750 = 3,00,714

There is a **deficit of approximately 3,00,714 beds** per night. This highlights a **critical shortfall** in Ayodhya's accommodation infrastructure, pointing to an urgent need for expanded lodging facilities to support current and future tourism levels.

4.2 Transportation demand and supply gap

To assess the supply and demand of transportation in Ayodhya as a tourism hub, Below is a structured approach:

- **Transport supply:**

  Intra-City Transport Supply

  Only includes modes used for daily in-city mobility (excludes airport/rail)

Table 19. Daily Passenger Capacity by diff. Transportation Modes

Mode	Daily Passenger Capacity	Source/Justification
City Bus Terminus	50,000	MoHUA Urban Bus Guidelines; tier-2 city average
EVs, E-rickshaws, Autos	20,000	UITP, NIUA, and TERI estimates based on shared mobility data

Informal Shuttles (Estimated)	15,000	Estimated from comparable religious cities like Varanasi, Tirupati
Total Daily Supply	85,000	Excludes railway and airport (used only for entry/exit, not intra-city travel)

Transport Demand Calculation

Formula:

$D=P\times T\times F$

Where: P= Population (tourists or residents), T= Average trips per person per day

F = Modal split factor (proportion using public/shared transport)

Source: This approach is standard in transport planning literature and is discussed in transport economics presentations and academic resources

Data:

- **Average tourists per day** of 2024 : 450,000
- **Resident population**: 257,150

  (Forecasted Population by Average annual growth method)
- **Average trips per person**

  Tourists: 3 trips/day

  Residents: 2 trips/day

  Source: These are standard assumptions in urban transport demand studies and are supported by transport planning literature
- **Modal split factor**: 0.7 (i.e., 70% use public/shared transport)

  (This is a typical value for Indian tier-2/3 cities during peak tourism, based on mode share data in transport studies)

Calculations:

- **Tourist Demand: $450,000\times3\times0.7=945,000$**
- **Resident Demand: $257,150\times2\times0.7=360,010$**
- **Total Daily Transport Demand: 945,000+360,010=1,305,010**

Table 20. Demand and supply Gap of Transportation

Metric	Value
Tourist Transport Demand	9,45,000
Resident Transport Demand	3,60,010
Total Transport Demand	13,05,010

Bus Daily Supply	50,000
EV/Auto Daily Supply	20,000
Informal Shuttles (Estimated)	15,000
Total Transport Supply	85,000
Demand –supply gap	12,20,010

Gap Analysis

- **Demand**: The combined daily demand from tourists and residents using public/shared transport is **1,305,010 passenger trips.**
- **Supply**: The combined daily capacity of major public/shared transport modes is **134,080 passenger trips.**
- **Gap = 1,305,010 – 85,000 = 12,20,010**
- **Gap**: There is a significant shortfall—**demand outstrips supply by nearly 10 times.** This underlines the urgent need for expanding transport infrastructure, increasing fleet size, and improving mode integration, especially during peak tourism seasons

Ayodhya's current and planned transport infrastructure is not sufficient to meet the projected demand from both tourists and residents. The city must rapidly scale up its transport capacity—especially in public transit—to support its ambitions as a major religious and cultural tourism hub

Interpretation:

- Over 1.2 million intra-city trips go unmet daily due to inadequate shared mobility infrastructure.
- If these trips shift to private vehicles, Ayodhya's narrow roads — especially near religious hubs — will face extreme congestion.
- NH-330 ring road's upper threshold (~192,000 vehicles/day) is already near breach during peaks.
- This isn't a supply problem alone — it's a challenge of unmanaged demand overwhelming a fragile, sacred urban fabric.
- Therefore, the solution lies in managing tourist mobility smartly, not expanding road or vehicle infrastructure.

4.3 Waste Management demand and supply gap

The demand and supply of solid waste management in Ayodhya city, using standard formulas and the latest available data, with sources cited for each figure.

Waste Generation (Demand) Calculation

Formula:

Total Waste Generation

(TPD)=∑(Population Group×Per Capita Waste Generation(kg/day))/1000

- TPD: Tonnes Per Day
- Source: This is the standard approach used in Indian municipal solid waste management planning, as per the Ministry of Housing and Urban Affairs (MoHUA) and CPHEEO guidelines

Data Used

- Tourist Population (avg/day): 450,000 (User input)
- Resident Population: 257,150 (User input)
- Per Capita Waste Generation:
    - Residents: 0.5 kg/person/day (urban India average, 2025 projection)
    - Tourists: 0.7 kg/person/day (tourist/floating population, higher due to packaging, disposables, etc.)
- **Calculation**

  A. Residents

  257,150×0.5=128,575 kg/day=128.6 TPD

  B. Tourists

  450,000×0.7=315,000 kg/day=315.0 TPD

  C. Total Waste Generation

  128.6+315.0=443.6 TPD (rounded to one decimal place)

Waste Management (Supply) Calculation

- Ayodhya Nagar Nigam is commissioning a 200 TPD solid waste processing facility in 2025.
- This is the main operational capacity for processing and scientific disposal of municipal solid waste.

Current and Planned Supply

- Current/Planned Processing Capacity: 200 TPD (solid waste processing facility)
- Door-to-door collection and coverage: Ongoing efforts for 100% collection in all 60 wards
- Additional informal/legacy disposal: Not counted as "scientific" processing

Demand-Supply Table

Table 21. Demand and supply Gap of Waste Generation Capacity

Metric	**Value (TPD)**
Resident Waste Generation	128.6
Tourist Waste Generation	315.0
Total Waste Generation	443.6
Processing Facility Capacity	200
Demand-Supply Gap	243.6

- Ayodhya generates approximately 443.6 tonnes of solid waste per day (residents + tourists).
- The main scientific processing facility can handle 200 TPD.
- There is a demand-supply gap of 243.6 TPD, highlighting the need for expanded processing capacity or additional waste reduction and recycling initiatives.

All figures and formulas are sourced from official RFPs, government reports, and national waste management guidelines.

4.4 Water demand and supply gap

The standard formula for urban water demand is:

Total Water Demand (MLD)=∑(Population Group×Per Capita Demand (LPCD))/1000

- **MLD**: Million Litres per Day
- **LPCD**: Litres Per Capita Per Day
- **Source:** Central Public Health and Environmental Engineering Organisation (CPHEEO) norms, cited in Ayodhya's water supply DPR .

Available Data

- **Tourist Population (avg/day):** 450,000 [avg. tourist per day of year 2024]
- **Resident Population:** 257,150 [by population forecast]
- **Per Capita Water Demand:**
    - **Residents:** 135 LPCD (CPHEEO standard for cities with sewerage)
    - **Tourists:** 70 LPCD (as per CPHEEO for floating population in cities)
- **Unaccounted-for Water (UFW)/Losses:** 15% (target for modern systems)

A. <u>Base Demand (before losses)</u>

- **Residents:** 257,150×135=34,715,250 L/day
- **Tourists:** 450,000×70=31,500,000 L/day
- **Total:** 34,715,250+31,500,000=66,215,250 L/day = **66.22 MLD**

<u>B. Including UFW (15% losses)</u>

Total Demand=66.22/0.85 =77.90 MLD

C. Cross-check with Official Projections

- Official Ayodhya 24x7 Water Supply Project Report projects 76.62 MLD for 2025, matching closely with above calculation.

Water Supply Calculation

Total Water Supply (MLD)=Sum of all operational water treatment plant capacities

Groundwater Sources:

- **Number of Tube Wells**: 15
- **Average Discharge per Tube Well**: 0.75 million litres per day (MLD)
- **Total Groundwater Supply**: 11.25 MLD
- **Treatment Method**: Chlorination is provided to these sources. (rcueslucknow.org)

Planned Enhancements: Saryu River Water Treatment Plant (WTP)**:**

- **Capacity**: 100 MLD, **Location**: Manjha Jamthara
- **Purpose**: To augment the city's water supply by utilizing surface water from the Saryu River.
- **Implementation**: Under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

Demand-Supply Table

Table 22. Demand and supply Gap of Water Supply

Metric	Value (MLD)
Resident Demand	34.72
Tourist Demand	31.50
Total Base Demand	66.22
UFW Adjustment	77.90
Official 2025 Demand	76.62
Current Supply	11.25
Planned Supply (2026)	100
Demand-Supply gap	66.65

- **Demand**: The total water demand for Ayodhya in 2025, including tourists and residents, is approximately 77.9 MLD after accounting for 15% losses.
- **Supply**: The current water supply capacity is about 11.25 MLD. By 2026, supply will increase to 100 MLD with the completion of the new WTP
- **Gap = 77.90 – 11.25 = 66.65**

Gap: There is a significant shortfall—**demand outstrips supply by nearly 6 times.**

4.5 Public Toilet demand and supply gap

Public Toilet Demand Calculation

Formula:

Required Public Toilets=Population/Norms (users per toilet per day)

Source: Swachh Bharat Mission (SBM) Guidelines and National Building Code (NBC) of India recommend 1 public toilet seat per 100 users for places with high footfall (tourist areas, markets, transit hubs).

Data Used

- Average tourists per day: 450,000
- Resident population: 257,150
- Norm (users per toilet per day): 100 (SBM/NBC standard for high-footfall public places)
- Assumption: Most residents have access to household toilets, but for calculation, we include 10% of residents as potential public toilet users (commuters, workers, slum dwellers, etc.), which is a standard urban planning practice.

Calculation

A. Tourists

450,000/100=4,500 public toilet seats needed for tourists

B. Residents (10% of total)

257,150×0.10/100=25,715/100=258 public toilet seats needed for residents

C. Total Public Toilet Demand

4,500+258=4,758 public toilet seats needed

Public Toilet Supply Calculation

- 2,000 public toilets: Constructed for visitors as of early 2024, as part of city infrastructure upgrades for the Ram temple opening.
- 500 prefabricated toilets: Being installed at Saryu Ghats for religious events and peak tourist periods.
- 35 new smart public toilets: Under construction in crowded areas, markets, and transit hubs in 2025.

Total Supply

2,000+500 =2,500 public toilet seats

Demand-Supply Table

Table 23. Demand and supply Gap of Public Toilet

Metric	Value (toilets)	Source(s)
Tourist Toilet Demand	4,500	SBM/NBC,
Resident Toilet Demand	258	SBM/NBC, calculation
Total Toilet Demand	4,758	SBM/NBC, calculation
Public Toilet Supply	2,500	Calculated
Demand-Supply Gap	2,258	Calculated

- **Demand**: Total public toilet seats needed in Ayodhya for current tourist and resident load is 4,758, based on SBM/NBC norms.
- **Supply**: The city currently has about 2,535 public toilets (2,000 citywide, 500 at Saryu Ghats, 35 new smart toilets).
- **Gap**: There is a shortfall of 2,223 toilet seats to meet recommended standards for hygiene and convenience during peak tourist periods.

Ayodhya's public toilet infrastructure (2,558 seats) falls short of the estimated demand (4,758 seats) for its daily tourist and resident load, based on national standards and current city data.

4.6 Overall Capacity Gap and SWOT Analysis

SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, likely centered on tourism or urban development of Ayodhya. It organizes key internal and external factors into four distinct quadrants to evaluate current conditions and future potential.

Table 24. Strength, Weakness, Opportunities and Threats(SWOT) Analysis

Strengths	**Weaknesses**
- Global spiritual identity centered around Ram Mandir - Multimodal regional access (NH-330, railway, airport) - Government funding via Smart City Mission, PM Gati Shakti - Existing cultural assets, ghats, and religious calendar driving footfall year-round	- Core zone congestion and traffic bottlenecks - Sanitation and public toilet shortfalls during festivals - Under-capacity in lodging and waste systems - Lack of coordinated crowd and vendor management strategies
Opportunities	**Threats**
- Development of multi-nodal tourism circuits (religious, cultural, heritage) - Smart mobility and pedestrian-first zone implementation - Public-private models for eco-accommodation and sanitation - Digital monitoring for crowd density, water use, and waste loads	- Over-tourism leading to cultural dilution and infrastructure fatigue - Environmental degradation near Saryu river and temple zones - Political sensitivity and land disputes disrupting continuity - Informal sprawl and unregulated development around growth corridors

Ayodhya's tourism potential is massive but currently facing serious infrastructure gaps. Without strong scientific carrying capacity management, Ayodhya may experience urban stress, tourist dissatisfaction, and environmental degradation.

4.7 Problem Identification

Table categorizing key problems by sector—Accommodation, Transportation, Waste Management, Tourist Amenities, and Cultural Pressure—along with affected locations. It notes issues such as limited lodging during peak seasons, traffic congestion near major religious sites, poor waste disposal, inadequate public facilities, and overcrowded temples. These problems are most severe in central zones and key pilgrimage routes.

Table 25. List of Problem and there Location

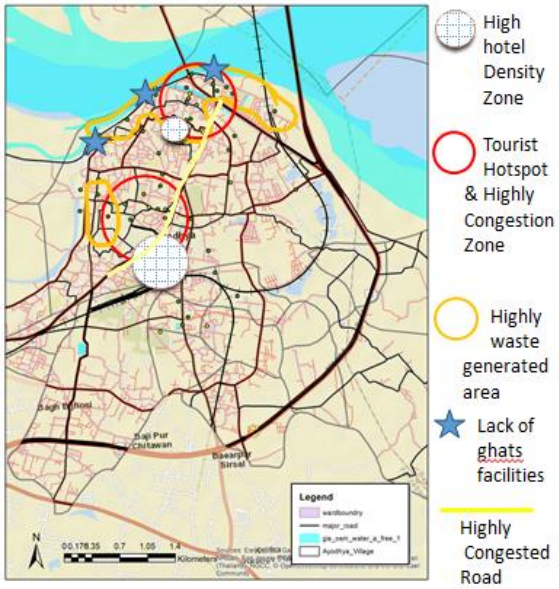
Category	Problem	Location / Area Affected
Accommodation	• Inadequate bed capacity during peak seasons	Central Ayodhya
	• High tariffs during festivals (Prices rise significantly - limiting affordability).	Janmabhoomi Marg, Ram Path corridor
	• Uneven distribution of lodging facilities	Dense in central zone
	• Low satisfaction ratings from tourists	Central accommodations
Transportation	• Traffic congestion on major religious corridors	Ram Path, Sugreev Qila to Hanuman Garhi
	• Narrow streets and encroachments in high-footfall zones	Ramkot, Hanuman Garhi, Gali Ramghat
	• Limited parking infrastructure & organized public transit(near railway station, Bus terminal & airport)	Near major temples, Guptar Ghat, Sugreev Qila
Waste Management	• Poor segregation and informal dumping	Market areas (Rekabganj, Naya Ghat), temple exits
	• Overflowing bins and festival litter accumulation	Saryu riverfront, Ram Ki Paidi, Parikrama Marg
	• Limited processing of biodegradable and temple waste	Janmabhoomi temple zone, Kanak Bhawan
	• Inadequate sanitation infrastructure	Slum-adjacent tourist routes, Guptar Ghat
Basic Tourist Amenities	• Inadequate public toilets and poor maintenance	Bus stand, near Ghats (Naya Ghat, Guptar Ghat
	• Limited clean water access during peak seasons	Parikrama Marg, temple complexes
	• Absence of changing rooms and resting spaces near ghats	Naya Ghat, Raj Ghat, Guptar Ghat
	• Lack of well-managed tourist help desks and signage	Entry points (Railway station, Airport, Hanuman Garhi)
Cultural & Site Pressure	• Overcrowding at major temples and spiritual hotspots	Ram Janmabhoomi, Hanuman Garhi, Kanak Bhawan
	• Underutilization of secondary spiritual and cultural destinations	Mani Parvat, Guptar Ghat, Raj Sadan
	• Disconnected religious circuits and lack of thematic trails	Ramayana circuit, Panchkosi and Chaudah Kosi Parikrama
	• Weak promotion of local crafts and souvenirs	Craft shops near Rekabganj, Ayodhya market

Tourism-related challenges in a specific area, likely Ayodhya. Key issues include severe accommodation shortages and inflated prices during festivals, forcing visitors into distant

or makeshift lodgings. Tourist amenities are overly concentrated in central areas, leading to poor access on the periphery. Common complaints involve inadequate sanitation, crowding, and lack of clean toilets—particularly affecting women, the elderly, and disabled visitors.

Transport issues include traffic congestion, insufficient feeder buses, and narrow streets unable to handle festival crowds. Parking overflows into heritage zones due to a lack of structured facilities. Waste management is another major concern, with improper disposal of religious waste, insufficient biodegradable processing, and poor festival clean-up.

Basic needs like water access and changing facilities at ghats are lacking. Tourists also face orientation problems due to limited multilingual signage. Overcrowding at major temples strains infrastructure, while lesser-known sites remain under-promoted. Fragmented religious circuits, limited access to local crafts, lack of artisan marketplaces, and minimal youth and women involvement highlight the need for better planning, infrastructure, and inclusive tourism development.



The map that visually represents these challenges using color codes and symbols. It identifies high hotel density areas, congested tourist hotspots, zones with heavy waste generation, poorly equipped ghats, and traffic-clogged roads. The map reinforces that core tourist areas face multiple overlapping issues, underscoring the need for better infrastructure, planning, and resource management.

Figure 49.Location of Identified Problems(Source Author)

Chapter - 5
Recommendations and Proposals

To address Ayodhya's key challenges in accommodation, transportation, waste management, basic amenities, and cultural site pressure, a set of integrated recommendations is proposed to benefit both tourists and residents.

5.1 Infrastructure Redistribution

The phased approach to address critical challenges in the accommodation sector of a tourism destination. It identifies key issues such as limited bed capacity during peak seasons, inflated prices during festivals, and the uneven distribution of lodging facilities—all of which contribute to reduced tourist satisfaction.

The strategy is divided into three phases with targeted interventions. **Phase I (2025–2027)** emphasizes short-term solutions such as promoting homestays and conducting hotel rating audits. **Phase II (2028–2031)** focuses on medium-term developments, including the creation of new tourist housing zones and the integration of smart booking systems. **Phase III (2032–2035)** aims for long-term sustainability through measures like dynamic seasonal pricing, the development of mixed-use tourism nodes, and the introduction of an accommodation tax.

PROPOSAL COMPONENTS

1. **Tourist Accommodation Shift**
    - Encourage new hotels near NH330 bypass, Ayodhya Airport road, and new bus terminals
    - Use Transfer of Development Rights (TDR) or FAR incentives to relocate hotel chains outside the core
2. **Create Decentralized Transit Nodes**
    - Park & Ride near Tedhi Bazar, Sahadatganj**,** Naka, and Airport zone
    - Smart ticketing + electric shuttle service into temple zone
3. **Land Use Zoning Overlay**

- Add a “Religious Core Preservation Zone” in Master Plan
- Control high-rise, signage, and vending within this boundary

4. **Integrated Development Plans (IDPs)**
    - Prepare Local Area Plans (LAPs) for:
        - Naya Ghat node (riverfront tourism)
        - Faizabad Bypass zone (logistics + budget hotels)
        - Near Airport corridor (eco-accommodation, tourist plaza)

POLICY RECOMMENDATIONS

1. **Revise Master Plan zoning**: Designate Temple Core as “Heritage + Religious Use Only”
2. **Amend Building Regulations**:
    - No hotels within 250 m of major shrines
    - Enforce green buffer around Saryu Ghat
3. **PPP Incentives**: For private sector to invest in outer ring tourism nodes
4. **Form Joint Planning Cell** under Ayodhya Development Authority (ADA) + ULB to monitor land-use transition

—all designed to enhance accommodation quality, equity, and visitor satisfaction.

5.2 Smart Mobility & Pedestrian Zones

Transportation - This section of the strategic framework, centered on "Transportation," addresses key mobility challenges within the destination, particularly in high-traffic pilgrimage zones. It highlights persistent issues such as severe congestion along major religious corridors, encroached narrow streets, and insufficient parking and public transit infrastructure near critical nodes like the railway station, bus terminal, and airport.

To resolve these issues, the strategy adopts a **phased implementation plan**. **Phase I (2025–2027)** introduces electric mini-bus shuttles, maps encroachment-prone areas, and pilots dynamic traffic control systems around key temple zones. **Phase II (2028–2031)** focuses on building multi-level parking facilities and launching an integrated plan for public transport and pedestrian movement. **Phase III (2032–2035)** emphasizes long-term solutions such as a ring road bypass for tourist buses and the development of smart mobility hubs.

Core recommendations include the creation of a comprehensive Ayodhya Urban Mobility Plan, enhancement of last-mile connectivity through electric rickshaws, and leveraging the PRASHAD scheme to fund pedestrian-priority zones. Additionally, the framework advocates for a strategic relocation of accommodation development.

KEY STRATEGIES

1. Core Area Pedestrianization:

- Convert Ram Janmabhoomi Path, Saryu riverfront promenade, and Ram Ki Paidi Road into pedestrian-only corridors
- Restrict all private vehicles and informal autos in this zone during peak hours

2. Electric Shuttle Loop Development

Operate GPS-enabled electric minibuses connecting: Railway Station, Airport drop-off, Parking at Naka and Tedhi Bazar, Outer tourism nodes (from Proposal 1)

3. Smart Traffic & Pedestrian Infrastructure

- Install IoT sensors at key choke points for live crowd density monitoring
- Use AI-powered route dashboards at entry terminals to direct tourist flow
- Smart signage (multi-lingual) for shuttle routes, walking paths, emergency exits

4. Centralized Parking & Park-and-Ride System

- Establish parking hubs at: Naka, Sahadatganj, Airport Road, Railway Station rear side
- App-based booking + QR shuttle access for tourists

POLICY RECOMMENDATIONS

1. Amend local street-use policy to create “Pilgrim Mobility Corridors” with traffic restrictions
2. Introduce a Smart Mobility Cell under the Tourism Monitoring Committee (Proposal 5) for daily regulation
3. Incentivize only zero-emission tourist transport in city limits (via permit system)
4. Declare Pedestrian Priority Zones (PPZs) via ULB bylaws

5.3 Sustainable Amenities & Utilities

Problem Focus: Ayodhya faces major challenges in basic tourist-supportive infrastructure, particularly in:

1. **Waste management**: Unsegregated collection, temple waste overflow, littering during festivals, low processing capacity
2. **Sanitation and water access**: Inadequate number and poor maintenance of public toilets, limited clean water access during peak season
3. **Tourist comfort**: No changing/rest areas, information booths, or signage in key zones

STRATEGIC COMPONENTS

1. Eco-Toilets & Mobile Sanitation Units

- Install 100+ bio-digester or vacuum-based eco-toilets in core area & circuits
- Introduce portable toilets for Ram Navami, Diwali, Kumbh-like events
- Use solar-powered lighting for night use

2. Smart Waste Management

- Deploy smart bins with IoT sensors in key locations (temples, ghats, circuits)
- Establish decentralized bio-CNG units & composters at: Ram Katha Park (event waste), Saryu bank (temple flower waste)
- Involve SHGs in doorstep collection and segregation

3. Drinking Water & Refill Stations

- Install 50+ water ATMs / refill booths at all high-footfall entrances and exit points
- Use solar pumps for remote edge areas
- Ensure regular chlorine testing and UV systems

4. Sustainable Lighting & Cooling

- Solar-powered LED street lighting in: Temple corridors, Saryu Riverfront,Tourist circuits
- Promote cool-roof materials in temporary lodging, stalls

POLICY RECOMMENDATIONS

1. Include eco-sanitation and smart waste mandates in building byelaws for tourist structures
2. Mandate "Green Infrastructure Compliance" for any PPP-based hospitality/tourism project
3. Allocate 10–15% of Ayodhya's Smart City funds to decentralized utility pilots
4. Establish Utility Monitoring Cell under CTMC to track usage, uptime, maintenance

PHASING STRATEGY

Table 26. Phase wise Strategies for Sustainable Amenities & Utilities

Phase	Year	Focus
I	2025–26	Pilot 20 eco-toilets and 50 smart bins; mobile water units during events
II	2027–28	Set up composters + bio-CNG plants, expand sanitation network
III	2029–30	Full coverage of core + mid-zone with smart sanitation and zero-waste zones

EXPECTED OUTCOMES

a. 100% access to sanitation for tourists & locals in core areas
b. 60% waste processed sustainably (vs. current 5%)
c. 24×7 clean drinking water availability across visitor corridors
d. Visible cleanliness and tourist satisfaction improvement during festivals
e. Position Ayodhya as a "Swachh Tirtha City" model for others

5.4 Tourism Circuit Development

PROBLEM IDENTIFICATION

Your analysis shows that over 70% of tourist activity is concentrated in a few iconic locations, leading to:

- Severe crowding at Ram Janmabhoomi, Hanuman Garhi, and Saryu Ghat
- Neglect of lesser-known but important temples, ghats, and cultural landmarks
- Short average stay (1.8 days), limiting economic benefit to locals
- Missed opportunities for local storytelling, crafts, and economy diversification

LOCATION-SPECIFIC ISSUES

Table 27. Specifics Zones having Tourist Issues

Zone	Issue
Ram Janmabhoomi – Hanuman Garhi – Saryu Ghat	Overloaded with tourists and vendors, environmental stress
Temples like Nageshwar Nath, Kanak Bhawan, Dashrath Mahal	Visited sporadically due to lack of signage, circuit planning
Ghats and Kunds (Brahma Kund, Vidya Kund)	Culturally important, but disconnected from tourist routes
Outer rural spiritual sites (Guptar Ghat, Bharat Kund)	Untapped for experiential or eco-tourism

PROPOSED CIRCUITS

Table 28. Types of Circuits for Ayodhya city

Circuit Type	Sites Included	Experience Type
1. Core Religious Circuit	Ram Janmabhoomi, Hanuman Garhi, Kanak Bhawan, Dashrath Mahal, Sita Rasoi	Devotional pilgrimage, pedestrian route
2. Cultural-Heritage Circuit	Ram Katha Park, Tulsi Smarak Bhawan, Raja Mandir, Ayodhya Art Museum	Folk traditions, theatre, sculpture
3. Peripheral & Eco Circuit	Bharat Kund, Guptar Ghat, Vidya Kund, Saryu riverfront stretch	Peaceful experiences, spiritual ecology, meditation spots

1. Religious Circuit

a. **Theme:** Focused on major religious sites, likely for pilgrims.
b. **Locations:** Primarily covers the central religious core of Ayodhya.
c. **Route:** Starts near Sarayu Ghat (Manjha Kala area) and traces a path through key temples.
d. **Starting Point:** Sarayu Ghat (Manjha Kala).
e. **End Point:** Shree Ramjanmbhoomi Temple Ayodhya.
f. **Waypoints/Landmarks:** Sarayu Ghat (Manjha Kala), Kanak Bhawan, Dashrath Mahal Ayodhya, Shree Ramjanmbhoomi Temple Ayodhya.
g. **Distance and Duration:** Approximately 3.2 km, with an estimated duration of 45 minutes.
h. **Localities/Other Description:** The route seems to primarily follow "Ayodhya Dhyan Marg" and "Ram Path," indicating a well-defined pilgrimage path connecting significant religious institutions.

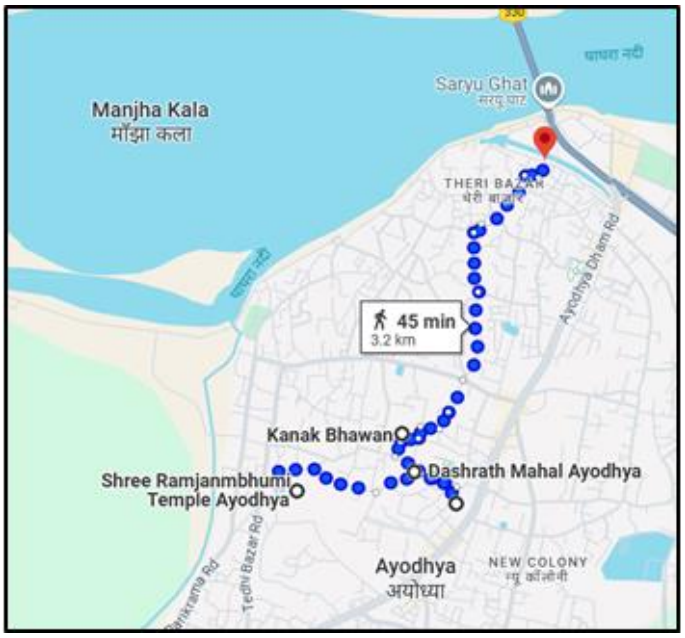


Figure 50.Religious Tourism Circuit (Source Author)

2. Cultural Circuit

a. **Theme:** Highlights cultural sites and possibly less overtly religious landmarks.
b. **Locations:** Covers a broader area than the religious circuit, encompassing cultural points.
c. **Route:** A somewhat circular route starting near Manjha Kala and extending towards Ram Katha Park.
d. **Starting Point:** Manjha Kala (near Sarayu Ghat).
e. **End Point:** Ram Katha Park (though the route forms a loop, suggesting an exploration of the area).
f. **Waypoints/Landmarks:** Manjha Kala (Main ki rasoi), Ramjanmbhoomi Temple Ayodhya, Sugreev Qilla, Tulasi Smarak Bhavan, Ram Katha Park, and a point near "Bila Paying Guest House in Ayodhya."
g. **Distance and Duration:** Approximately 6.4 km, with an estimated duration of 1 hour 29 minutes.
h. **Localities/Other Description:** This circuit seems to delve into areas with cultural significance beyond just temples, including a guest house and a park, suggesting a more leisurely exploration of Ayodhya's cultural fabric. The route shows a significant portion along National Highway 27.

Figure 51.Cultural Tourism Circuit (Source Author)

3. Hidden Gems of Ayodhya

a. **Theme:** Focuses on lesser-known or secondary attractions that are not as prominent as the main religious sites.
b. **Locations:** Extends to the west and south of the central religious zone.
c. **Route:** Starts near Sarayu Ghat (Manjha Kala) and moves towards the south-western part of the city.
d. **Starting Point:** Manjha Kala (Sarayu Ghat).
e. **End Point:** Hotel Suncity Plaza (near Karsewakpuram).
f. **Waypoints/Landmarks:** Manjha Kala, Korea Park, Tretanath Mandir, Ram Katha Sangrahalay, and Hotel Suncity Plaza.
g. **Distance and Duration:** Approximately 4.7 km, with an estimated duration of 20 minutes.
h. **Localities/Other Description:** This circuit aims to uncover the "hidden gems," which are likely historical or cultural sites that offer a different perspective of Ayodhya, possibly away from the main pilgrim crowds. It appears to utilize roads like "Terhi Bazar Road" and the main highway.

Figure 52 . Hidden Gems Tourism Circuit (Source Author)

4. Hidden Heritage

a. **Theme:** Specifically highlights historical or heritage sites that might be less frequented.
b. **Locations:** Concentrated in the southern and western parts of Ayodhya.
c. **Route:** Begins near Thehri Bazar and moves southwards towards specific temples.
d. **Starting Point:** Thehri Bazar.
e. **End Point:** Ram Patt Temple.
f. **Waypoints/Landmarks:** Lord Rishabadev Jain Temple, Shree Luv Kush Temple, Sita Rasoi Bhajnan and Bhawan, Nandi Parvat/Temple, and Ram Patt Temple.
g. **Distance and Duration:** Approximately 3.3 km, with an estimated duration of 20 minutes.
h. **Localities/Other Description:** This circuit specifically focuses on historical and religious sites with a unique heritage, such as a Jain temple and sites related to Ramayana. It appears to involve traversing through residential or older parts of the city.

Figure 53. Hidden Heritage Tourism Circuit (Source Author)

KEY STRATEGIES

1. Physical Improvements

- Wayfinding signboards in Hindi + English + Sanskrit + Others
- Footpath upgrades, lighting, benches, route markings
- QR-coded plaques at each site for self-guided tours

2. Cultural Activation

- Organize weekly heritage walks, katha recitals, and evening Ganga aarti at multiple ghats and Promote local crafts markets at circuit entry points

3. Smart Integration

- Build a tourism mobile app with: Circuit maps, Audio guides, Booking and schedule of events. Create a digital pilgrimage passport (Ayodhya Yatra Tracker)

🏛️ POLICY RECOMMENDATIONS

- Include circuit development in the Ayodhya Master Plan as **priority mobility and cultural assets**
- Fund circuits under **Swadesh Darshan 2.0** and **PRASHAD Scheme** (Ministry of Tourism)
- Empower local SHGs and temple trusts to co-manage interpretation centers and event zones

OUTCOMES

- Reduce footfall pressure on the core temple zone by 20–30%
- Boost tourist stay from 1.8 days to 2.5–3+ days
- Improve visibility and upkeep of neglected cultural assets
- Empower locals via tourism-linked employment and storytelling roles
- Increase the city's cultural brand value beyond spiritual tourism

5.5 Institutional Monitoring & Governance

PROBLEM IDENTIFICATION

Your findings show that while Ayodhya is witnessing unprecedented tourism growth, the city's **institutional mechanisms** to manage it are **fragmented and reactive**.

📍 **Key Governance Problems:**

- **No single tourism authority** exists to coordinate crowd, waste, mobility, and emergency responses in real time
- **Transport is managed by RTO**, sanitation by ULB, events by district admin — with **little integration**
- No system for **real-time monitoring** of tourist footfall, solid waste levels, or transport congestion
- **Festival planning is ad hoc** — reliant on temporary committees that dissolve post-event

LOCATION-SPECIFIC GOVERNANCE GAPS:

Table 29. Specific Governance Gaps in Ayodhya city

Zone	Governance Issue
Ram Janmabhoomi Zone	No permanent control room or footfall sensor data during peak times
Saryu Ghat & Ram Ki Paidi	No mechanism to monitor waste overload and water pollution dynamically
Major Access Points (Naka, Railway Stn)	No feedback or help kiosks for tourists to report issues
Peripheral Circuits	Lack of communication between SHGs and ULB on cleanliness, crowd flow

Institutional Structure for Tourism Monitoring & Evaluation – Ayodhya City

The provided framework illustrates the **Institutional Structure for Tourism Monitoring & Evaluation in Ayodhya City**, designed to ensure effective planning, oversight, and delivery of tourism-related services. It integrates both urban and rural tourism management under a unified

system of governance and coordination, with clear roles, stakeholders, and communication mechanisms to benefit tourists and residents alike.

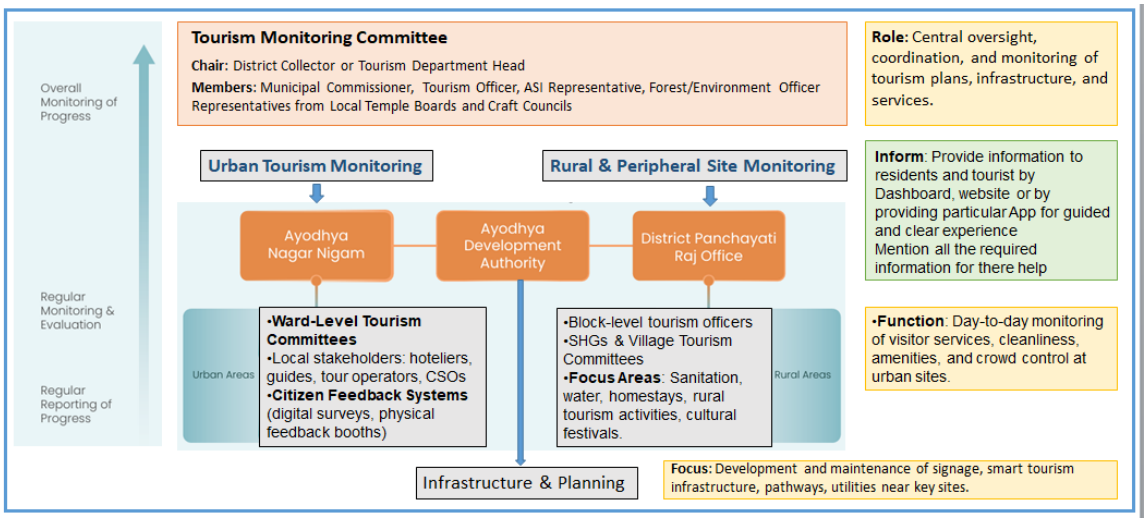

Tourism Monitoring Committee
Chair: District Collector or Tourism Department Head
Members: Municipal Commissioner, Tourism Officer, ASI Representative, Forest/Environment Officer Representatives from Local Temple Boards and Craft Councils
Role: Central oversight, coordination, and monitoring of tourism plans, infrastructure, and services.
Overall Monitoring of Progress
Urban Tourism Monitoring
Rural & Peripheral Site Monitoring
Ayodhya Nagar Nigam
Ayodhya Development Authority
District Panchayati Raj Office
Inform: Provide information to residents and tourist by Dashboard, website or by providing particular App for guided and clear experience
Mention all the required information for there help
Regular Monitoring & Evaluation
Urban Areas
•Ward-Level Tourism Committees
•Local stakeholders: hoteliers, guides, tour operators, CSOs
•Citizen Feedback Systems (digital surveys, physical feedback booths)
•Block-level tourism officers
•SHGs & Village Tourism Committees
•Focus Areas: Sanitation, water, homestays, rural tourism activities, cultural festivals.
Rural Areas
•Function: Day-to-day monitoring of visitor services, cleanliness, amenities, and crowd control at urban sites.
Regular Reporting of Progress
Infrastructure & Planning
Focus: Development and maintenance of signage, smart tourism infrastructure, pathways, utilities near key sites.

Figure 54. Structure of Tourism Monitoring Committee (Source Author)

Framework Description:

At the top, the **Tourism Monitoring Committee**—chaired by the District Collector or Head of the Tourism Department—oversees the entire tourism system. It includes members like the Municipal Commissioner, Tourism Officer, ASI representative, Forest/Environment officials, and local stakeholders such as temple boards and craft councils. This body is responsible for central coordination, strategic decisions, and monitoring overall progress.

Tourism monitoring is divided into **Urban** and **Rural & Peripheral** branches:

- Urban Tourism Monitoring involves bodies like Ayodhya Nagar Nigam and the Ayodhya Development Authority, supported by Ward-Level Tourism Committees. These committees include hoteliers, guides, tour operators, CSOs, and rely on Citizen Feedback Systems such as digital surveys and feedback booths.
- Rural & Peripheral Site Monitoring is handled by the District Panchayati Raj Office, block-level officers, SHGs (Self Help Groups), and Village Tourism

Committees. Focus areas here include sanitation, water, homestays, cultural festivals, and rural tourism development.

At the base of both branches lies Infrastructure & Planning, which focuses on developing smart tourism infrastructure like signage, pathways, utilities, and digital tools.

DIGITAL TOOLS & SYSTEMS

1. Tourism Command & Response Dashboard

- Footfall data from infrared counters or GIS cameras at major temple entries
- Shuttle occupancy, toilet usage, waste bin fill levels, emergency alerts

2. Mobile Reporting App (Ayodhya Connect)

- Crowd feedback, emergency calls, cleanliness reporting
- Live updates on road closures, queue timings, festival events

3. Festival Control Room Protocol

- Temporary "war rooms" with CCTV feeds, medical access maps, crowd counters
- Use of AI to predict congestion during peak movement

🏛 POLICY RECOMMENDATIONS

- Include CTMC as a formal institutional body in the **Ayodhya Master Plan**
- Allocate a **permanent budget line item** from Smart City + State Tourism funds
- Use **MoHUA's ICCC (Integrated Command Control Centre)** model as a template
- Link monitoring with citizen charter KPIs for sanitation, safety, and visitor services

PHASING STRATEGY

Table 30. Phase wise Strategies of CTMC

Phase	Year	Focus
I	2025–26	CTMC formation, dashboard prototype, stakeholder training
II	2027–28	Real-time data integration (shuttles, bins, toilets), app launch
III	2029–30	Full AI-enabled smart governance, festival control room institutionalized

Expected Outcomes

- Rapid **response system** for crowd, waste, and mobility crises
- **Inter-departmental coordination** = fewer service lapses during festivals
- Improved tourist experience: faster grievance redressal, real-time guidance
- Data-driven decisions = better planning, budgeting, and trust from stakeholders

Overall Perspective & Benefits:

This structure promotes a **holistic, participatory, and data-driven approach** to tourism governance in Ayodhya. It enables real-time monitoring, integrates local voices, ensures accountability, and allows better coordination between urban and rural efforts. Supporting departments—like Culture, Handicrafts, Transport, Forest, and Urban Development—contribute regularly to cross-sectoral planning and implementation.

Benefits for Tourists include improved information access, a safer and more pleasant experience, and access to lesser-known sites. **Residents** benefit through employment opportunities, a boost in the local economy, better civic services, and cultural pride and preservation.

In essence, this institutional setup aims to balance tourism growth with sustainable development, ensuring Ayodhya remains a vibrant, clean, and inclusive spiritual and cultural destination.

Vision

"Ayodhya as a global spiritual capital—where tradition meets technology, faith meets function, and every visitor finds both devotion and discovery."

Future Scope

1. **Institutionalization**:
    - Establish the **Tourism Monitoring Committee (CTMC)** as a permanent governance body.
    - Integrate planning efforts between Ayodhya Development Authority, ULB, Temple Trusts, and tourism agencies.
2. **Policy Integration**:
    - Embed your proposals into the **Ayodhya Master Plan 2031**, **Swadesh Darshan 2.0**, and **Smart Cities initiatives**.
3. **Pilot Implementation**:
    - Begin with demonstration zones: a smart shuttle loop, a pedestrian temple circuit, and a zero-litter ghat.
    - Measure KPIs to guide future scale-up.
4. **Community Engagement**:
    - Empower SHGs, youth, and religious institutions to maintain sanitation, signage, and tourist services.
    - Launch awareness programs for sustainable pilgrim behavior.
5. **Digital Expansion**:
    - Evolve the proposed mobility and waste dashboards into a unified **Ayodhya Tourism App** with AI-based visitor flow predictions.
6. **Replication Potential**:
    - Document lessons and apply this framework to other heritage cities like Chitrakoot, Haridwar, or Mathura under the PRASHAD mission.

Conclusion

Ayodhya is rapidly transforming into a major pilgrimage hub, particularly after the Shri Ram Janmabhoomi Temple's development, attracting millions and straining its urban infrastructure. A study, "Urban Infrastructure Strategies for Managing Tourism-Led Growth in Ayodhya," highlights critical challenges like inadequate accommodation, severe traffic, poor waste management, and insufficient amenities, leading to overcrowding and dissatisfaction.

Based on tourism data, infrastructure audits, and stakeholder feedback, the study proposes a phased roadmap (2025–2035) to enhance resilience, livability, and sustainability. Short-term actions include promoting homestays, using electric shuttles, and improving waste segregation. Long-term plans involve creating thematic tourism circuits, smart mobility hubs, and heritage trails to manage visitor flow.

The strategy also suggests institutional mechanisms like a Tourism Monitoring Committee for coordination, and the development of Religious and Cultural Heritage Circuits to enrich visitor experience and preserve cultural identity. Supporting policies include tourism housing guidelines, green certification, and digital monitoring. This integrated approach aims to make Ayodhya a resilient, inclusive, and globally recognized pilgrimage destination, prioritizing infrastructure upgrades, local economy, cultural conservation, and environmental stewardship, setting a national model for tourism-driven urban growth.

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